January Thoughts 41-

THE NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE, HORTICULTURE, AND KINDRED ARTS.

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R. P. EATON & CO., Publishers, Office, 34 Merchants' Row — MONTHLY. — SIMON BROWN, S. FLETCHER, Editors.

AN OLD FRIEND, IN A NEW DRESS.

ENCOURAGED by the unprecedented success of the *weekly* NEW ENGLAND FARMER, since the first of January, 1865, the proprietors now resume the publication of the *monthly edition* of the NEW ENGLAND FARMER, and intend to make it one of the most valuable and popular magazines of its kind in the country. As will be seen, it is enlarged beyond the size of the old series, is printed on better paper, and will be continually improved by adopting such changes as progress in the art of printing may present. Especial pains will be taken to condense its articles, so as to introduce as much variety as possible upon all the leading branches of agriculture, such as the location and construction of farm buildings; the reclamation of lands; the science and practice of drainage; the modes of seeding lands; the cultivation of orchards; gardening, for domestic and market purposes; the raising of small fruits; bee culture, and the principles of breeding stock, and the modes of feeding and tending, so as to secure the largest amount of growth and profit, with the greatest economy.

To these will be added notices of the introduction of new and valuable farm implements and machinery, such as will be supposed to enable the farmer to produce larger and better crops than heretofore, at a less cost of time and labor. Great as has been the advance in these things during the ten years just past, others of much value, if not of equal importance, will undoubtedly succeed them. As the cost of clothing, groceries, and other articles which the farmer does not produce, increases, so must the products of his fields increase,—but as this will not, probably, be in an equal proportion, he must be constantly advised of the means of *producing at the least possible cost*, so as to avail himself of all practical labor-saving helps as they are introduced.

The MONTHLY FARMER will also be a suitable medium through which to disseminate the improvements which are continually introduced in domestic industry,—in the *house*, as well as in the field. No farm is entirely well conducted, where the *kitchen* is not well managed. The importance of this department of labor has been somewhat overlooked. Valuable receipts, notices of new things intended for the kitchen, larder, wash-room, dairy, and other portions of the house, are frequently given in the weekly journal, but before they can fairly be considered, the paper becomes lost or destroyed. It is too ephemeral in its nature. But the *monthly* issue not only disseminates information, but brings it in a form where it can be preserved

and referred to in future years with readiness and ease.

The family, for instance, wishes to avail itself of some appliance that operates well and saves the strength of women, already overtasked. The notice of such appliance comes when the attention is engrossed with present and oppressive cares, and little notice is taken of it. By-and-by a more favorable moment occurs, and the mind reverts to the subject, but the paper containing it is gone, and with it all the necessary details. The *monthly* issue, however, being in the form of a book, is preserved without trouble, and on referring to it the complete index which it contains leads at once to the subject desired. Such a work increases in value as it increases in age. Indeed, a gentleman who has the entire volumes of the old series, informs us that his copies go about his town much as does a winnowing mill where there is but one in a neighborhood! If a well is to be dug, a cistern built, a field drained, barn or house erected, garden or grounds laid out, horses trained or shod, or any other work to be done, he says some information may readily be found in the MONTHLY NEW ENGLAND FARMER in relation to it.

Such *is* the fact,—and this information is drawn from a large number of the most practical and intelligent persons—men and women—in the community.

The MONTHLY FARMER for the year 1860, has *five hundred and seventy-six* broad and beautiful pages, printed in large, clear letters, and treating at greater or less length, upon between *two and three thousand* subjects, or illustrating or elucidating the same topics in different ways and by different persons. There is scarcely a subject of interest to the farmer, gardener, horticulturist, mechanic, housewife, philanthropist, or teacher, but is noticed in these pages, and may readily be referred to by the aid of the ample index given at the opening of the volume!

In addition to this mass of matter and information, there are also nearly *one hundred illustrations*, not pictures picked up here and there, merely to please the eye and fill a page; but engravings that truly illustrate the subject in hand, made expressly for the work, and at a very considerable outlay of money, as the designs of fruits, cattle and buildings will at once show. It is intended to make every succeeding volume as good as the volume for 1860, and better if possible.

The old series of the MONTHLY FARMER contains *fifteen* volumes. These have been so popular that not a single entire set can be found for sale. The new series will come sufficiently near them in size to preserve uniformity and a good appearance upon the shelf, and together will make the most valuable library the farmer can possess. They will be worth more as books of reference, than they will be as mere current reading. We suggest, therefore, that every copy taken be carefully laid aside for binding, and preserved as a record of agricultural practice and progress at the time at which they were written and printed.

FARM WORK FOR JANUARY.

ACCOUNTS.—The first work in the opening of the New Year should be to close all accounts, if it were not done in December. Nothing tends to prosperity and harmony among neighbors more than a perfect understanding between them in matters of business. When these all go smoothly, there will usually be good feelings and reciprocal kindness in the neighborhood. Delays are dangerous.

THE STOCK.—Allow no sloven to have care of the stock. Fodder is too valuable this year to be wasted. Feed a little at a time, beginning with the poorest fodder in the morning, and end with it at night. Let the *sheep* have a choice of remaining under cover or going out, as they please. If the weather is cold and *damp*, they will generally prefer to be under cover. If clear and cold, even if the thermometer is below zero, they usually prefer the open air. Do not crowd them anywhere, either in pen or yard. They love freedom. Give them a *variety* of food, if possible. No animals like it better. They will thrive more on a *variety*, if a portion of it be less nutritious, than on one kind of rich food. Let them have access to pure water. They like to drink very slowly and be a considerable time about it. Be friendly with them, using no harsh gestures or language, and they will like you all the better for it, and bring you heavier lambs and more wool.

Let the *colts* have a roomy and sunny yard to ramble and roll in, and warm quarters for stormy weather. Have no ditches, old fences, or cast-off wheels, carts, sleds or rubbish of any kind for them to tumble over and scar their

bodies or break their legs. Feed and tend them well, and they will make your purse plethoric, by-and-by, as prices for horses are going now.

Look after the *yearlings* and *two-year-olds* carefully. A warm place, good hay and a little grain, will make you fond of showing them to your neighbors occasionally.

THE POULTRY.—This branch of farm stock probably pays more for the money invested in it than any other. Treat the poultry fairly and the poultry will treat you to flesh and eggs accordingly. They need an airy, dry, sunny place, where they are protected from winds and dampness, and can bask in the winter sunshine, whenever it condescends to come into their windows. They like *variety* as well as sheep. Boiled potatoes, mashed with corn and cob-meal, dry corn, oats, barley and butchers' scraps are all excellent. Corn and *cob* meal is better than clear meal, as they are apt to get too fat on the latter.

SWINE.—Look out for the store pigs. They are sometimes "nasty creatures," but they like good victuals and warm nests notwithstanding. There is no profit in keeping them meanly.

THE HOUSE.—Pile up the first snow about the house, and you will save fuel by it. It is a fine blanket.

JANUARY is the starting point on our journey for the year. If we begin well, we shall be more more likely to end well. Let us try it this year. Certainly, agreed, all round.

ACQUAINTANCESHIP.

Fifteen years have now gone by, friends, since we first went forth to meet you in your fields and by your firesides, and began to record our experiences in the great art of farming, and to collate for your pleasure or profit the opinions of those among you who have communicated to these columns.

The profit has been mutual. They certainly have been years of progress and profit to us.

You have been teachers in turn, not only in the excellent articles you have steadily furnished, but in the examples so often witnessed in your agricultural practice, and in the sound opinions often expressed in your fields and around your firesides, during our numerous visits among you.

Our whole intercourse with you has been pleasant. Our opinions have been sincerely given, and have been received for all they were worth. They have sometimes been controverted, but in that spirit of comity which could give no offence.

Most of the articles we have presented have grown directly out of our daily practice on the farm, either in personal manipulations, or in the supervision of others. They have not been transcriptions from books, nor the theories of those who write from the representations of others, but, as every practical farmer will see, remind one of the soil in every line. We *practice* what we preach.

That these pleasant relations may continue, and that the *New Year* upon which we have entered may be one of great moral and agricultural progress, is our sincere wish.

FEROCIOUS BEES.—On driving into his yard with a load of wood, a Mr. Berry, a farmer in Madison county, Illinois, was met, as we learn by the *Prairie Farmer*, by an enormous cloud of bees, and before he could possibly turn his team out of the way, they covered himself and his horses to the depth of two or three inches, stinging both horses to death in a few minutes, and greatly endangering his own life. His men hearing his trouble came to his relief and carried him to a neighbor's house. A physician was called, and by the use of proper antidotes, his life was saved. They also attacked the family in the house and they had to save themselves by flight. Mr. B. is an old and very successful bee raiser, and could handle them in ordinary management without even getting a sting.

APPLES IN NEW HAMPSHIRE.—Last October we published a paragraph relating to the fruit crop in New Hampshire. Since that time we have visited two or three of the eastern counties of that State, and find that in these counties there has been from one-third to one-half of a good crop of apples. In June there was little prospect of so favorable a result. Then, insects were abundant, and the young fruit was falling from the trees in great numbers. The apples which we saw were fairer than they are in Massachusetts, and more highly colored. The best Baldwins were selling for $4 to $4.50 per barrel. Considerable cider was being made, for which there was a ready demand on every hand, at rather high prices.

WINTERING STOCK.

Good country hay is now selling in Boston for thirty dollars a ton, and Eastern pressed hay for twenty-six dollars and upwards. Good English hay sells at twenty-two to twenty-six dollars in the country towns in the vicinity of Boston, where it had averaged about sixteen dollars per ton for many years previous to the rebellion. Corn meal is now retailed at $2.70 a bag, and all other articles ordinarily used for feeding neat stock and horses in the winter, are proportionately high.

Under this condition of things, two points of interest to every farmer ought to be carefully considered.

The first of these is, that farming cannot be profitably conducted in New England without the use of considerable manure,—and that the natural, sure, and economical mode of obtaining manure is by keeping stock. Good, progressive farming, ought to enable us to *add one animal* to our herd of neat stock every year, and feed them all well. This would be evidence of progress and thrift. If we kept five last year, keep six this, and so continue to do until every acre is brought to its maximum power of production. Under such a practice of farming, there would be no want of manure after the system was once in operation, and, with careful culture, there would be almost a certainty of good crops, whatever the season might be. Seed time and harvest is promised to us, and the promise has held good for ages, and will so continue. With our part judiciously performed, there should be no apprehension that the result will not be favorable. We have no recollection of a season when the bountiful soil of New England would not produce sufficiently for all her children, provided their labor had been given to its cultivation.

The next point of interest is, how shall we sustain our stock, and still spare some portion of the hay and grain to exchange for cash to meet bills for taxes, groceries, clothing, and a thousand other incidental expenses that come into every family? Let us see.

The hay crop of last summer was scarcely an average one, but was generally well preserved, and is, therefore, more than ordinarily nutritious. As a partial compensation for lack of quantity, the fall feed has been abundant and good, so that cattle will come to their stalls this fall in good condition. We have rarely noticed them appearing so well. The corn crop is also good; the corn fodder, buts and husks, are unusually heavy.

The farmer can bring his stock to their winter quarters this fall, therefore, under quite favorable circumstances. It now remains with him so to feed out what he has so carefully laid up, as to take his stock through the winter in a growing condition, on the coarse and less valuable portions of his crop, and leave a surplus for market, or to be fed to fattening animals, or milch cows, which would be only another, and perhaps better, form of selling the hay.

In the first place, we earnestly recommend the *cutting of as much of the fodder* as possible—the whole of it, English hay and all, as far as it can be done consistently with other circumstances. We will not pause here to give special reasons for this recommendation, but will make them the subject of another article hereafter.

In most cases the farmer has a *variety of fodder*, such as meadow hay of two or three qualities, herdsgrass, redtop, oat, barley, or rye straw, and the top stalks of corn, and buts. and husks. Either of these, except the English hay, fed alone would soon impair the appetite of the cattle, and they would fail to eat it. If the coarse kinds of fodder were changed from day to day, the stock would select the best portions, push about and breathe on the remainder and then utterly refuse it, unless they were kept very short—too short to grow fat or yield any valuable product. But if all kinds are mingled and run through a hay cutter, the whole will not only be eaten by the stock, but they will thrive upon it in a remarkable degree.

Our practice has been to use about equal portions of the various kinds of fodder, cut and mixed, thrown into a heap, sprinkled with water, and then thrown over, adding a little salt as the process is continued. When the weather is so cold as to prevent fermentation, some kind of meal is added when the salt is, and the heap is allowed to remain a day or two before commencing to feed from it. But if the weather is warm, the meal is mixed with it as it is used.

If the farmer has raised grain of any kind, it is cheaper to use a portion of it in this way, ground into meal, than to sell it,—selling a portion of the fodder instead—if he must dis-

pose of one or the other. By mixing the meal with the cut fodder, the whole becomes flavored with the taste and smell of the meal, so that the cattle will eat every particle of the hay and straw, and leave only a few of the hard joints of the corn buts. Fed regularly three times a day—about as much as they will readily eat at each foddering—horses, oxen and cows thrive as well as ever they did on as much uncut English hay and the same quantity of grain. Every ton of good, sweet corn fodder fed in this way is worth, in our opinion, nearly as much as a ton of English hay. The cutting is done at any convenient moment, but especially in stormy weather, when several hundred pounds are cut in a single day, sprinkled, salted, and piled up.

A most ample experience in this mode of feeding stock, has convinced us beyond a doubt, that it is a much cheaper mode of using winter fodder than the old one, of feeding it out long and unmixed to the cattle.

All kinds of stock *like a variety of food*, and thrive upon it better than they will upon a single kind, even if a portion of that variety is not so nutritious as the one kind supposed. There is no doubt in our mind, but that a large saving is made in using winter feed by the mode we have described; more than enough to pay for the cutting, if a man were hired by the day to do it. Any kind of meal may be used in mixing—corn, rye, barley, oats, rice, or that of oil cake.

FRUIT STEALING.

Very many people are deterred from planting trees and vines in consequence of the insecurity of the fruit, resulting from the depredation of poachers. Even here in New England, and in other sections of the country which enjoy our boasted system of universal education, our home influences, and our religious and moral principles, there is a sad laxity of obligation in respect to "coveting" this species of our neighbor's goods. The following statement by a New York correspondent of the *Country Gentleman*, illustrates a "barbarism" which is altogether too prevalent, and which has too long disgraced our civilization.

A few days ago we visited a vineyard in the eastern part of this State, where a man was kept constantly, night and day, to protect it from thieves. And we know a village in this State where, some years ago, an enterprising citizen set out a vineyard of about seven acres, and never received back enough to pay for the vines, owing to this atrocious system of thieving. Nay more: while he lay on his deathbed, a vineyard of about five acres was nearly despoiled; and on the very day of the funeral, in broad daylight, and in full view of the funeral cortege, parties entered a small vineyard near his homestead, for the purpose of stealing, and not merely for the purpose of taking a single bunch to eat, but provided with baskets to carry off their plunder!

Hay Cutters.—Now that fodder of every kind is high, every means of making it go as far as possible ought to be employed. Among them is the use of the hay cutter. Those who try it, and mix the same amount of grain in the form of meal, that they gave with the long hay, will become satisfied of the economy of its use. But do not purchase a *small one*. It may cost less money than a large one, but it will not be half so economical. A single jerk upon it—when crowded with hay, straw, or corn fodder—by a strong man, would probably render it useless, whereas a larger one would withstand it. But such violence should never be used upon any machine.

The saving of time between a small hay cutter and a medium or large one, in the work which they would do, would soon pay the difference in their cost. If there is only a small number of animals to be fed, the large or medium machine will be the cheapest in the end.

Reason for Draining Land in England. In the account of his visit to Cheshire county, England, Mr. Willard remarks that there are a great many marl pits, or places where the earth has been dug out and used for composts, years ago, and these places here are accumulations of water which soaks down from the surrounding soil, and furnishes a supply for stock in the different fields. Many of these pits are seven or eight feet deep, and cover a considerable space, making a respectable pond. "I was told that in the driest weather water was always to be found in these pits, the nature of the soil being such as to hold not only the water soaking in from springs, but that resulting from rains. In this respect the country presents quite a marked contrast to the dairy lands in America, since to see upon a level tract of land, ponds of water in the different fields, with no visible outlet or inlet, was, to me at least, an unusual sight."

PRODUCTS OF MILCH COWS.

The following is condensed from the *Hampshire Gazette's* report of the Hampshire, Franklin and Hampden Cattle Show, held at Northampton, Mass., Oct. 4 and 5, 1866:—

The first premium was given to J. L. Bosworth of Southampton, for a cow five years old. This cow was dried off the first of March last, and calved April 2d. During the week commencing April 16th, she gave 251 lbs. of milk, or 36 lbs. per day, which yielded 14 lbs. of butter. During the week commencing July 2d, her yield of milk was 30 lbs. per day, and the butter 12 lbs. Her feed was rowen hay and grass. Of course, such a cow *ought* to take the first premium, but the committee were sorely pressed in deciding between her and a cow owned by Charles S. Marsh of Easthampton. Mr. Marsh exhibited two cows. From May 17th to Oct. 1st, (136 days,) their milk produced 280¼ lbs. butter. This is at the rate of a little more than two lbs. per day, or a fraction more than one lb. per day for each cow. Taking the length of time and the season into consideration, this is doing remarkably well, though much less than what Mr. Bosworth's cow did. Yet Mr. B.'s cow might not have done better for the same length of time. The temperature of the atmosphere has very much to do with the rising of cream, and we have known a variation of three pounds of butter in the product of one cow in consecutive weeks in the month of June. There are few cows that yield so much butter as those of Messrs. Bosworth and Marsh. But Dea. Erastus Cowles, of Hatfield, who was on the grounds, informed us that he has a cow that has produced *twenty pounds* of butter in one week. The mother of this cow yielded *twenty-two* pounds in one week, and at that time he had two cows, from whose milk he made 42 lbs. of butter in seven days. The Deacon is a truthful man, and we believe him. Such cows should be exhibited every year, and we hope that next year Deacon Cowles will have his famous cow at the show. His cows, like the best milkers exhibited at this and several previous fairs here, are grades, mostly high grade Durhams. Mr. Marsh's cows are grade Durham and grade Herefords, the former averaging 14 quarts per day during the above trial, and at times giving 18 to 20 quarts, and the latter averaging 11 quarts. Had he made a fuller statement, showing what quantity of butter the grade Durham cow produced alone, the committee would have awarded him the first premium; as it was he took the 2d and 4th.

M. S. Kellogg, of Chicopee Falls, a dairyman of large experience, exhibited seven cows, four of which produced as follows:—1. "Jenny," calved Oct. 25, 1865, gave from Nov. 19 to Dec. 19, (31 days,) 1177 lbs. of milk, or 38 lbs. per day, and Nov. 19, 20 and 21, her milk yielded 4½ lbs. of butter, or nearly 10 lbs. per week. Her feed was clover hay and corn fodder, with one peck of turnips and three quarts of meal per day. The meal was three parts of broom-seed and one of ears of corn, ground together. In June, she gave 415 quarts of milk, or nearly 14 quarts per day, on pasture feed only. She calved again Sept. 24th. 2. "Myrtle," calved Nov, 23, 1865, gave from Nov. 26 to Dec. 26, (30 days) 1253 lbs. of milk, or nearly 42 lbs. per day. Dec. 10, 11, and 12 she produced 4 lbs. and 5 oz. of butter. In June she gave 291 qts. of milk, or nearly 10 quarts a day. Feed same as "Jenny's." 3. "Duchess," calved Dec. 16, 1865, gave from Dec. 25 to Jan. 25, (31 days,) 1335 lbs. of milk, or about 43 lbs. per day. Jan. 5, 6, and 7, her milk produced 5 lbs. 5 ozs. of butter. Feed same as above. In June she gave 343½ quarts of milk, or about 11½ qts. per day, on pasture feed only. 4. "Tulip," calved May 3, 1866, gave in June 1146 lbs. of milk on pasture feed. Mr. Kellogg's cows are Ayrshire, and he thinks this the best breed for milkers.

The little Jerseys came in for a goodly share of attention. A little beauty owned by George S. Clark, of Easthampton, two years old, secured much notice. She gave 9 to 10 quarts of milk per day on pasture feed—not a large mess, but the quality makes that balance—3 pints of cream produced 2¼ lbs. of butter.

Among the milkers, though not entered as such, was a little rusty-looking black Kerry cow, with tail and horns disproportioned to the rest of her make—one of a herd of four, owned by Dr. F. D. Huntington, of Hadley. This cow, bad as she looks, gave 16 qts. of milk per day, for three months. The milk is said to be remarkably rich.

Spencer Parsons, of Northampton, showed a very large native cow, 8 years old, weight 1500 lbs. She has given, with best pasture feed, 40 lbs. of milk per day, and produced 14 lbs. of butter in a week.

FALL MANAGEMENT OF SHEEP.

It requires a much smaller expenditure of feed to keep animals in good condition than to restore them after they are allowed to fall away. Bring your sheep to the barn in good order, and with comfortable quarters and good hay they may easily be made to thrive through the winter. If permitted to lose flesh in the fall, they lose also something of vigor and energy, and come up with appetites less keen and healthful. It is difficult to make them fill themselves. A liberal feeding of grain is necessary to bring them to a good condition.

Breeding ewes, especially, should be attended to. Keep them thriving every day and they will bring large, well-developed lambs and yield plenty of milk. Let them grow poor now, and the loss cannot be regained; next fall you will have a thin ewe and a mean lamb.

Sheep should not be exposed to the fall rains. They are very sensitive to cold and wet. The

evident discomfort with which they submit to soaking rains, even in the warm days of summer time, shows that it is, to some extent, injurious. The falling rain is usually cooler than the atmosphere. The evaporation of water retained by the fleece liberates heat from the body. A chill, a cold, and often a fever is the result. If all of these evils are escaped, the extra consumption of food to sustain the animal heat is a positive and a considerable loss.

Do not leave them to seek shelter in the woods. Bring them to the barn in every cold storm. Give them a little hay. The cost of a few bushels of grain and a few hours' time at this season will be repaid four-fold in the improved condition of the sheep.—*N. H. Farmer.*

AN AGRICULTURAL YEAST.

Some French writer as long ago as 1674 stated his belief that the soil contained the elements of fertility in abundance, and that eventually some simple substance would be found to act upon the land as yeast acts on dough. Mr. P. G. Kenny, "Near Rahway, N. J.," informs the *Working Farmer* that he thinks he has discovered this simple substance which is not only to supersede manure, but to effect such a "progression of the soil," as will cause "weeds to disappear from our fields, and insects, mildew, &c., from our trees, vines, grains and other crops." After reading the following statement of his success in the use of this "great fermenter," our readers will feel disappointed by the announcement that ten years must be devoted to further experiments, before the secret can be divulged. Can't some of our Agricultural Colleges assist Mr. Kenny in the perfection of his "yeast," so that we may set some of our fields "a rising" as soon as may be?

In the spring of 1865, I tested a substance on three trees in an orchard of 40 or 50 (peach); the leaves soon began to look darker than the others, fruit more healthy and large. Before trying it on these trees the fruit was dropping off—this arrested the dropping of the fruit on the three trees. They matured magnificent fruit; there were not 50 good peaches obtained from the balance of the trees. Early this spring I applied the remedy to two rows; result, color of the leaves much darker—later, applied it to all the trees—the leaves soon began to assume a darker hue. One tree was covered with leaves, many on the limbs ¼ to ¾ inches long, of a pale light yellow color, (presume this is yellows). About a month ago, tried experiments on this tree; in two weeks the leaves became darker; are now threefold in size and look healthy.

There has not been a worm or cob-web on the orchard this year, (this may be chance). My neighbor's orchard (apple) owing to the worm, will not mature one-sixth of a crop, and that will be knotty. The application hastens the growth of young trees, renders the bark smooth, and arrests the issue of gum.

TREATMENT OF CROUP.

Croup is an inflammation of the inner surface of the windpipe. Inflammation implies heat, and that heat must be subdued or the patient will inevitably die. If prompt efforts are made to cool the parts in case of an attack of croup, relief will be as prompt as it is surprising and delightful. All know that cold water applied to a hot skin cools it, but all do not as well know and understand, that hot water applied to an inflamed skin will as certainly cool it off. Hence the application of cold water with linen cloths, or of almost boiling water with woolen flannel, is very efficient in the cure of croup. Take two or three pieces of woolen flannel or two folds, large enough to cover the whole throat and upper part of the chest; put these in a pan of water as hot as the hand can bear, and keep it thus hot, by adding water from a boiling teakettle at hand; let two of the flannels be in the hot water all the time, and one on the throat all the time, with a dry flannel covering the wet one, so as to keep the steam in to some extent; the flannels should not be so wet, when put on, as to dribble the water, for it is important to keep the clothing as dry as possible, and the body and feet of the child comfortable and warm. As soon as one flannel gets a little cool, put on another hot one, with as little interval of exposure as possible, and keep up this process until the doctor comes, or until the phlegm is loose, the child easier, and begins to fall asleep; then gently wrap a dry flannel over the wet one which is on, so as to cover it up thoroughly, and the child is saved. When it wakes up, both flannels will be dry.—*Hall's Journal of Health.* 1867

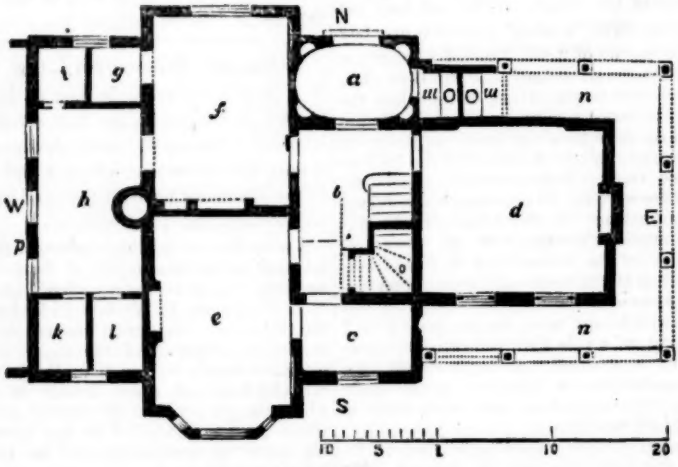
A Merited Compliment.—Gov. Bullock, in a speech delivered by him at the Norfolk County Agricultural Fair, thus speaks of the labors of President Wilder, who has given for a long life, his wealth, influence and energies, to the dissemination of horticultural knowledge and horticultural acquisitions:—

I meet here to-day the members of this youthful and prosperous society of Norfolk, sitting and rejoicing under the presidency of one, (the Hon. Marshall P. Wilder,) who has applied the results of well-earned commercial fortune to the development of the capacities of the earth, so largely and so liberally that in every household and at every fireside in America, where the golden fruit of summer and autumn gladdens the side-board or the hearth-stone, his name, his generosity, and his labors are known and honored.

PERSPECTIVE VIEW OF AN ENGLISH COTTAGE.

We present this month the elevation, and the arrangement of the rooms on the ground and chamber floors of a "Gothic cottage," transferred and engraved for the NEW ENGLAND FARMER, from Loudon's Encyclopedia of Architecture. We have not done so, expensive as it is to reproduce cuts, with the expectation that every body will be pleased with every feature of this house. We do not pretend it is faultless; we anticipate criticisms and objections. Still we believe it possesses peculiarities and advantages which may be adopted by those who are endeavoring to combine in one plan as many conveniences as possible. At any rate, we hope that many of our readers will find something in it to meet their wants.

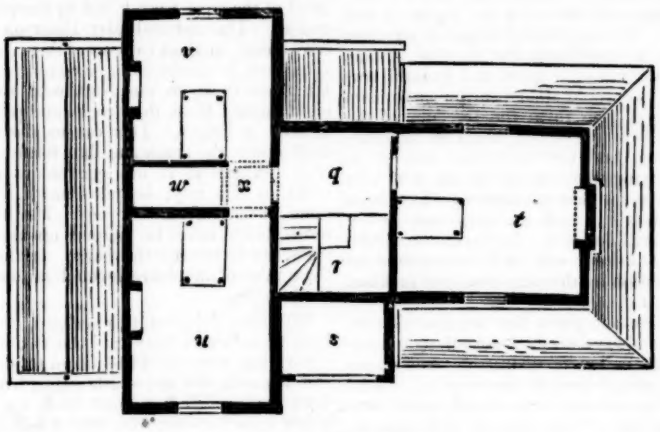
In the ground-plan, with the points of compass indicated by the letters N. S. E. W., (*a*) is the entrance porch, which is to be finished with a covered roof, and to have Gothic niches at the angles, for statues, or vases for flowers. From this you pass to the hall and staircase (*b*,) by a Venetian door, the upper part of which may be glazed with stained glass; thence to a small



Ground Plan.

ante-room (*c*,) which may be used as a book-closet, or, having a good southern exposure, as a conservatory for plants From this there may be a glazed door leading to a piazza, surrounding the eastern wing of the cottage. From the hall you enter the dining room (*d*,) the two windows of which may be brought down to the floor and open like French casements, so as to lead out to the piazza. From the hall you likewise enter the drawing room, (*e*,) which may have a glazed door opening into the conservatory. If preferred, *e* may be made the dining-room, and then a communication may be made with the kitchen, (*f*.) From the kitchen there is a door leading to a closet, or pantry (*g*,) and another to the back kitchen or wash-house, with a copper, (*h*;) a larder for meats, (*i*;) a place for cleaning knives, boots, lamps, etc., (*k*;) and a store room, (*l*.) There are two water-closets, (*m*. *m*.) both under cover; one entering from the porch, the other from the piazza. Under the principal staircase is a flight of steps, (*o*,) shut in by a door descending to the cellar. Behind the wash-house, (at *p*,) is a kitchen yard, which may be surrounded by a high fence, and covered with shrubbery; where may be the wood-house, privy, well, etc.

In the chamber floor plan, *q* and *r* show the landing and stairs; *s*, a balcony over the conservatory, entered from the staircase window; *t*, *u*, and *v*, bedrooms, with the places for the beds; *w*, linen-closet; *x*, passage-way.



Chamber Floor Plan.

For the New England Farmer.

UNDER LOCK AND KEY.

Self-preservation is an instinct with us all, yet there is a wide diversity of practice as to the modes of securing our goods and chattels. There are certain secluded rural districts where the good folks never think of locking their houses, or stables, and live in blissful ignorance of bolts and bars. And surely it is no trifling compensation for living so out of the way of the "march of civilization," that they are spared the thieves and burglars who follow in its wake. But even into such safe nooks and corners of creation, the fashion of locking up is gradually intruding, and there is hardly a community now in our own New England where the master of the house thinks of going to bed without looking to the fastening of his doors and windows. A worthy neighbor told me, however, that he never locked his barn or granary, because it was too much bother, and he had never suffered by the neglect. But no man is more careful or particular about making his house secure, and none more kind and merciful to his live stock. It is to be hoped that no mean horse-thief will ever constrain him to fasten the door upon an empty stall, but I could not help thinking in this connection of the old adage about locking the stable door after the steed was stolen.

There is a feeling of security when we have properly secured our houses and barns, that amply compensates for the trouble and expense. And if, in spite of these precautions, we suffer

from thieves and burglars, we have them only, and not ourselves to curse.

Some simple-minded people will, to this day, insist that all these devices for the protection of our persons and property argue distrust both of God and man. So they object to lightning-rods, as well as front-door locks, and feel sure that Providence will care for them better than for those who act on the principle that Providence cares for those who care for themselves—until some day the house is struck or robbed, and that shock shakes pretty effectually the scales from their eyes.

Locks may be picked, and trunks broken open, and cunning rascals seem to crawl through key-holes; the lightning may now and then set all conductors at defiance, and the devouring element baffle all efforts of man and machine to subdue it, but this only reminds us that having done what we could, above all God is our refuge and defence.

Neither does this resort to lock and key necessarily impute dishonesty to our domestic and farm help. Of course much depends on their characters as developed day by day. Some prove themselves such good and faithful servants that we could almost surrender to them the keys, and give them the freedom of the house; while others have a mania for pilfering and thieving, and not conscience enough to keep from lying when caught in the act. To such it is a mercy that bolts and bars have been invented, and that such an institution as the "lock-up" was devised. And even the former class may be kept safe and uncontaminated from temptation by this very device of lock and key.

But let us not press this too far. To my mind there always seemed something ungracious in the policy of distrusting every man till he has proved himself trustworthy. To be sure, in this present evil world, confidence must be a plant of slow growth, and no stranger can claim at once our trust. But how many poor, simple souls have been the victims of needless suspicions. How many originally honest hearts have been driven into dishonesty by a withdrawal of confidence. And into how many souls is iron driven by the bolted lid or door that bears false witness to their real intentions.

I remember an estimable Kentucky lady who conceded that the peculiar institution under which she had been born and educated was a great inconvenience because it obliged her to keep everything under lock and key, consequently her slaves grew up with the idea that they were all a thievish set, and were not slow to do credit to their training.

But even our Yankee housewives may be in danger of the same extreme by dividing their time between the "lock stitch" and their bunch of keys. However it is better to err on the safe side than to leave everything lying around loose. W. E. B.

Longmeadow, Mass., 1866.

For the New England Farmer.

ORCHARD OF ISAAC EMERSON.

We were much pleased with a visit to the orchard of Isaac Emerson, in Windham, Rockingham Co., N. H. This gentleman has made a business of cultivating fruit, apples and peaches in particular; and now devotes his whole attention to this branch of farming. His trees are very thrifty, and a large part of them show a most remarkable growth; not second, in this respect, to the very beautiful orchard of Mr. John French, of Northampton, which took the first State and County premiums. The soil on which a large part of Mr. Emerson's trees grow is not well adapted to the cultivation of ordinary farm crops, as there is only a depth of from one to three feet before striking a solid ledge.

One orchard of four acres is twenty years old from the bud and has been set nineteen years. In the winter of 1853–4 about one-third of the trees were killed by freezing of the trunks. This induced Mr. Emerson to contrive some method to protect them for the future; and he thinks he has a complete remedy. He places rocks on the Northwest side some eight inches from the trunks and piled about 2½ feet in height. This causes the snow to drift about the trunk and thus forms a protection. Where it is not convenient to place rocks in this way, he piles muck about the same distance from the trees. He thinks that muck should never be heaped up against the trees, as it injures the bark. In the spring, these piles of muck are leveled around under the branches.

On three acres of this orchard, crops have been raised every year until the two last. In cultivating, care should be taken to plough the soil towards the trees rather than from them. They were set 27 feet apart each way, and a peach tree between; but Mr. Emerson thinks that forty feet is a better distance even if no peach trees were set between the apple trees. Mr. French, of Northampton, N. H. is also of the same opinion, as he finds his orchard has attained such a luxuriant growth that he has had to remove a part of his trees. One acre of this orchard has been kept in grass constantly, but the trees have been carefully hoed around under the branches. This acre has made a growth which would be called good on most farms, as trees are generally cultivated; but there is a very marked difference between them and those on the part that has been cultivated; the trees being much smaller and have not borne as well in proportion to their size. One great peculiarity of Mr. Emerson's trees, is, that they have not been trimmed up, but have been allowed to branch out so low that the limbs reach very near the ground. He thinks, however, as the result of his experience, that he should not have them quite so low, were he to train an orchard again. The peach trees, from eighteen to nineteen years old, are

very thrifty, with large tops. They are mostly of the Early Crawford, Coolidge Favorite, and Seedling varieties.

Last year Mr. Emerson had on this orchard from sixty to seventy barrels of apples. This year the trees blossomed well and set for fruit, but a frost killed many of the apples when about the size of peas; and many of those that grew were one-sided, caused by the cold weather. Mr. Emerson has, however, a very good share of apples this year. He has other good orchards, but I have given a particular description of this as it illustrates his management, which has been very successful.

Much of the land in Windham is naturally well adapted for farming purposes and there are some good farmers and fruit-growers; but many of the farmers devote their time to teaming, to the neglect of their lands. In this, they mistake, in my opinion, their true interests; for the same labor devoted to their farms would in a few years pay them much larger profits. If they would try feeding grain to stock, either to make milk or for other purposes, for a few years, they would find it so.

Corbett's pond, in Windham, and its surroundings afford a most delightful prospect, and it would well repay all lovers of the beautiful in Nature to take a drive around the pond in any pleasant season of the year, especially in October. C. E. WOOD.

Nov. 1st, 1866.

For the New England Farmer.

METEOROLOGICAL RECORD.

These observations are taken for and under the direction of the Smithsonian Institution.

August.

The average temperature of August was 64°; average midday temperature 72°. The corresponding averages for August, 1865, were 68° and 78°. Warmest day the second, averaging 76°; coldest day the twenty-fourth, averaging 56°; coldest morning the twenty-fourth, thermometer 50°. Range of temperature from 50° to 84°.

Average height of mercury in the barometer 29.16 ins.; average do. for August, 1865, 29.25 ins.; highest daily average 29.42 ins. lowest do. 28.98 ins. Range of mercury from 28.94 to 29.45 ins.

Fifteen rainy days; amount of rain 5.97 ins. Six rainy days in August, 1865, and 1.47 ins. of rain. There was one cloudless day; on one day the sky was entirely overcast. No cloudless days nor days of total cloudiness in August, 1865. The difference between the temperature and also the amount of rain in August this year and that of same month last year will be noticed.

September.

The average temperature of September was 59°; average midday temperature 67°. The corresponding averages for September, 1865, were 65° and 75°. Warmest day the second, averaging 74°; coldest day the twenty-third, averaging 46°; coldest mornings the 16th, 23d and 24th; thermometer 34°. Range of temperature from 34° to 80°.

Average height of mercury in the barometer 29.26 ins.; average do. for September, 1865, 29.34 ins. Highest daily average 29.56 ins.; lowest do. 28.92 ins. Range of mercury from 28.88 ins. to 29.62 ins.

Fifteen rainy days; amount of rain 7.18 ins. Eight rainy days and 3.38 ins. of rain in September, 1865. There was one cloudless day; on five days the sky was entirely overcast. Five cloudless days and two days of total cloudiness in September, 1865.

These two months, August and September, will be long remembered as cold and wet all over the country, and especially when compared with last year. The earth, having become dried to a great depth by two years of drought, is now filling up again with water, of which we surely cannot complain, though some loss and suffering be caused thereby. A. C.

Claremont, N. H., 1866.

For the New England Farmer.

THE LANGUAGE OF FLOWERS AND PLANTS.

We do not, in this article, refer to the definitions given in some glossaries; for such definitions are arbitrary, capricious and unnatural. But we refer to the real unequivocal language of nature, in this her most beautiful aspect.

When Mungo Park, one of the early explorers of Africa, sank down with hunger, fatigue and sickness on the banks of the Niger—that geographical mystery of his age, in an inhospitable climate and among inhospitable inhabitants, and in despair of succor, resigned himself to death, a beautiful though small and modest plant caught his languid and almost dying eye, and said to him, "He who has done so much to sustain and adorn so humble an object as myself, will not forsake thee." Mark how this corresponds with the language of Scripture: "If God so clothe the grass," &c. Encouraged and invigorated by this appeal, he arose and reached a native settlement, where, among pitiless men, the pity of woman came to his relief.

What was the language of that modest flower, a few years ago transplanted at Botany Bay from England? I think it was the common primrose of England, *primula vulgaris*. Would it have been of any avail to have told the people of that settlement, that according to our glossary the language of that flower was—*Confidence?* No. To the hardened criminals of that penal colony, this flower, this memento of the innocence of their childhood, spake a language which needed no interpreter. Before it they knelt in homage, and in sobs and tears gave vent to an irrepressible emotion.

What says the common morning glory of

summer, *Ipomœa purpurea*, to those who awake betimes to be greeted by its early freshness? Does it not say,—there *is* a land of beauty and of joy forever, there *is* a heaven? When labors and cares oppress us, when friends forsake and disappoint us, when misfortunes wound and grieve us, let us ask counsel of the smiling, loving flowers. Will they not say, "Peace be still. In your patience possess ye your souls. God is good, God is love; all will yet be well."

Each order and genus of plants has its peculiar language. A few only say, "Begone;" nearly all say, "Come, and we will bless you."

We will briefly notice what seems to be the language of one of the orders; the *Labiata*, mint family. The little modest flowers, all with open mouths are saying: "We are a large, square-stemmed family of 125 genera and 2350 species. Do not fear us, for we are all honest and true; we are warm and cordial in our friendship, and our mission is to do good. Do not rudely trample us under foot, lest we be compelled to waste our perfume in unavailing endeavors to attract you. For your good we will surrender our pleasant lives, and you may pluck us in the bloom of youth and lay us by forgotten; only remember us when you are in sickness and in pain, that we may come and bless you."

The immortality of flowers. Not the visible, tangible flowers—nothing is more perishable than they. The things that are seen are temporal, but the things which are unseen are eternal. The artist may have such an accurate conception of a beautiful object as to be able to paint it, or construct it of wax or other material. Now there can be no doubt in this case which is the perishable and which the durable, which the shadow and which the substance. The materials of the tangible flower are not its essence in any sense. They are mere materials and may form various objects. Nor is their combination, merely, the essential flower; but their combination in conformity to a plan. Hence the *plan*—the idea—is, after all, the essential, indestructible, immortal flower. Every essential beauty of the creation, before it is shadowed forth in materiality, must have existed in the Divine mind, and must continue to exist where there is no forgetfulness or obliteration. There may be kinds of knowledge which will vanish away, but the knowledge of such things as are essentially invisible and eternal is itself eternal.

It is a most encouraging and consoling sentiment, that in tracing out the plans of the great Creator, and thus thinking the thoughts of God, we are making mental acquisitions which like the moral and religious will endure forever. I. B. HARTWELL,

Wilkinsonville, Mass., 1866.

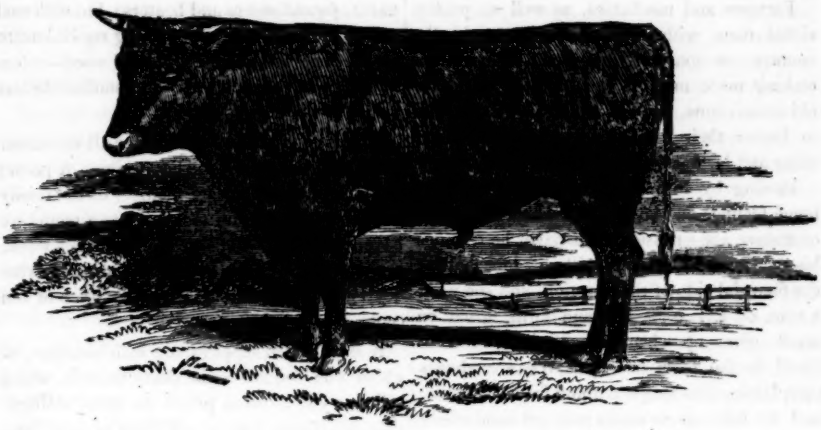
THE farmers of Rupert, Vt., and vicinity have formed an association for making cheese.

CAPITAL AND LABOR.

The great objection to my farming is, that I "spend too much money for hired help." But I cannot get along with less. And I find the best farmers expend the most money for labor. "I have always kept a great many men," said John Johnson, "but I was always with them and kept them at work." This is the point. If the labor is well directed, and is judiciously employed—if the farmer plans his work so that there will be no loss of time, he can better afford to hire extra help, than to let teams lie idle.

We cannot farm now as when the country was new. If we attempt it as many do, poor crops and run down farms will be the result. We must expend more labor and more capital. We must cultivate our land better, feed higher, make richer manure, and see that it does not run to waste. I am fatting over fifty hogs. "It would pay you," said a good old-fashioned farmer in the neighborhood, "to let a man devote his whole time to feeding them." No doubt about that; but you say I keep too many men already. My horse barn is separate from the other buildings. The litter is thrown out into a loose heap, and if suffered to remain so, soon heats, and becomes fire-fanged. I draw it with a one-horse cart into the barn-yard, and the pigs work it over and make it into the richest kind of manure. But this takes labor. I clean out the pig-pens every day, and give fresh litter. But this, too, takes labor. One of my neighbors says, I wash my pigs with warm water and castile soap. This was one of his jokes; but I *do* try to have the pigs and pens washed occasionally, by throwing water on them with an aquarius. The pigs evidently enjoy it, and thrive better; but this, too, takes labor. I am drawing the potato tops into the barn-yard for the stock to tread into manure. It will pay twice over, but it takes time. The diseased potatoes I steam up for the hogs, and mix corn and barley meal with them while hot, mashing up the potatoes. It makes splendid food, and is the best way to use potatoes partially decayed. But the sorting out the decayed ones, washing them and steaming and mashing with meal, involves considerable work. It would be much easier to have a pen of rails on the ground, to throw all ears of corn into the mud, and let the pigs do their own shelling, grinding, and cooking.

To farm properly, we need capital and labor. The latter we are now getting at fair rates, as compared with the price of living. We have land enough and work enough. But we need more capital and a lower rate of interest. And surely these men are to be honored who, having large capital, (I could wish I was one of them,) go on to a farm and employ it in developing the resources of the soil. There are hundreds of such men, and the number is rapidly increasing. Their influence and example must tend to the improvement of our general system of agriculture.—*Joseph Harris, in Am. Agriculturist.*



THE DEVON RACE OF CATTLE.

Many of the handsomest and best oxen now in use among the farmers in New England are of the Devon blood. They are straight on the back, the head small and eyes bright, very quick in their movements, and when slaughtered, excellent for the shambles. Many suppose that the origin of the natives was largely Devon.

The north part of Devonshire, in England, has long been celebrated for this breed of cattle—beautiful in form and color, in the highest degree; and in activity at work, and facility of fattening, unrivaled. The color of the Devon cattle is of a beautifully bright, full, blood-red, often with a clear white line on the brisket, running back between the hind legs, sometimes reaching to the flank, with a white brush. The head of the ox is singularly small, the forehead broad, the eye prominent and bright, and the forehead hollow between them; the muzzle very light and clean; no dewlap or loose flesh about the jaws and neck; remarkably straight, smooth, well-turned limbs; a light, tapering tail; a thin, free skin, and very smooth body. His fore-legs stand farther back under the body than those of other breeds. The Devon has rather long legs, is more active and sprightly than any other, and may be made to trot three or four miles an hour, which no other ox can stand. The cow is quite small; the bull is a great deal less than the ox, and the cow smaller than the bull. It is not uncommon for a cow to bring a calf which becomes twice her own size and weight.

WOOL GROWERS' ASSOCIATIONS.

We have received from the Secretary of the National Wool Growers' Association the following circular which we publish with pleasure. The importance of the measures now in progress, in which all wool growers have so deep an interest, makes it very desirable that the National Association should be able to communicate readily with all local auxiliary associations, whether State, county, or town.

To the Officers of all Wool Growers' Associations in the United States:

GENTLEMEN:—Will you please forward to my office, at the earliest moment possible, the names and Post Office address of the Officers of your societies, with the number of members you have enrolled.

We desire to procure the address of officers, and number of members of district, county and township associations as well as those of State organizations; as the address of *every* Wool Growers' Association in the United States is desired.

It is earnestly hoped that *all* will respond *promptly*. By order of the Executive Committee.

W. F. GREER, *Secretary*
National Wool Growers' Association.

Painesville, Ohio, Nov. 20, 1866.

THE Editor of the Hartford *Post* speaks favorably of the following varieties of the newer pears: Andrews, Sheldon, Doyenne Boussock, Pater Noster, Beurre Langelier, B. Hardy, Emile d'Hyest, Merriam, Clapp's Favorite and Dana's Hovey. The following are mentioned as among the best of the old standard sorts: Bartlett, Flemish Beauty, Louise Bonne de Jersey, Seckel, Buffum, Beurre d'Anjou, Vicar of Winkfield, Diel, and Duchesse d'Angouleme.

SHALL I SELL MY LITTLE FARM?

Farmers and mechanics, as well as professional men, with comfortable homes in the country, are constantly tempted by the idea of making more money, to abandon old friends, old associations, and old habits of life, and seek to better their condition by removal to the cities and large towns.

Passing by for the present, the sacrifice of home feelings and enjoyments which every man of mature age surrenders whenever he changes his accustomed home, we will now look only at the financial side of the question, and see what a man, on any New England farm, great or small, gives up when he leaves it and goes to dwell in the town or city. We are always complaining that we get nothing from our farms, and we fancy if we could only get somewhere where money is more abundant, where wages are higher, where there is more going on, we should have some chance to be rich, and live more independently.

Perhaps there has never been a time when, in this country, a farm, or even a field or garden contributed so much to the independence of a family of moderate means as in these times of high prices. The reason is obvious. It is because all that we buy, whether rent, or fuel, or provisions, costs more than ever before, and all that we do, by way of labor, produces a greater value in the crops we raise.

You say you get little or nothing from your farm. Let us consider the matter and see whether we do not underrate the profits of the homestead. In the first place, you get your rent, an item of which farmers hardly think. Go to any large town, and such a house as will be as respectable for your family there as your present one is here, will cost you in rent some four hundred dollars. It may be newer and nicer than the old homestead, but it will be no more comfortable or convenient.

We say nothing of its being in some narrow, noisy street, where you don't know your nearest neighbor, and where you must hire watchers in case of sickness. That belongs to the sentimental side of the question, which to-day we leave out of sight.

Next, your farm gives you your fuel,—you don't know how much, for you never had occasion to measure it. A farmer's family of half a dozen persons consumes yearly from ten to fifteen cords of wood at least. Less fuel would suffice in the city, with a liberal outlay for furnaces, patent stoves and heaters; but with coal at ten dollars a ton—a ton being equivalent to about one cord of the best hard wood—when kindlings are paid for, another hundred dollars would be about used up.

A cow or two afford the farmer all the butter and milk he can use for his family. A pound of butter a week for each member of the family is a fair estimate, and at fifty cents a pound we have for our family of six, three dollars a week, or $150 a year, and if we add only two wine quarts of milk daily, at the city price of ten cents, we have $73 more.

A small patch supplies you with potatoes, of which you require some thirty bushels, which will cost you at retail prices as many dollars, although if you want to sell them at your farm they will bring much less, there being two or three profits between the producer and the city comsumer.

A very few trees supply your apples, worth four or five dollars a barrel if you buy them. And any ordinary garden gives the family vegetables fresh in summer, which the city will not do at any price.

The small matters of currants, and raspberries, and strawberries, the pears, the grapes, —all become large matters when paid for in money. The fowls that give abundance of eggs, and a supply of poultry for Thankgiving and Christmas, seem of little account till reduced to a specie basis; and two or three porkers grow up with little cost, and in autumn are worth a hundred dollars almost before we know it, and thus our bills for pork and lard and fresh meat are easily balanced with the butcher.

In the country, everybody has a horse. We care little about driving, perhaps; but the boys and girls, at least the boys, ought to learn to ride and drive, and they do that and learn how to tend the horse and cow without going to an agricultural college. In the city or town, only men of wealth can afford to keep horses, and hiring them at stable prices is almost as expensive.

So, brother farmer, when you have got into your hired house, with never a wood-lot, nor a garden, nor a potato patch, nor a cow, nor a hen, you may also set it down that you can have no horse; and if you, however prosperous in money matters, do not sigh for the flesh-pots

of the old homestead, come up to the NEW ENGLAND FARMER office and tell us the other side of the story. 4 71-

CULTURE OF FOREST TREES.

The late war gave occasion for great inroads upon nearly all the timber lands of New England, and especially upon its forests of white oak. Whether near a railroad, or not, scarcely a farm has left standing upon it the giant oaks that have given it grandeur and value through two or three of the generations just passed. Their oaks now float upon the waters of all the seas of the world, and are wrought into the powerful engines of destruction that protect our coasts and command the respect of all foreign naval powers.

The great extent of manufacturing throughout all New England, has also drawn upon our forests until they are nearly exhausted in all its more thickly-settled portions. There is scarcely any conceivable implement, or article of machinery, that is made of wood, but what is manufactured among us, from a lucifer match to the mast of a ship or her keelson. The annual growth has not kept pace with the enormous demand, and consequently our forests are reduced, and manufacturers are forced to seek supplies far off and at greatly increased cost.

It is time to look at this matter considerately, and do something to secure future supplies. What shall it be?

1. *We must protect and manage better the young forests we now have.*

This may be done by enclosing them with substantial fences, so as to keep cattle from browsing and breaking down the young trees.

Another point is, to commence a *thinning process* at an early period and continue it for many years. Foresters of great experience in England state that "more plantations are ruined from neglect of thinning, than from any other cause." If the trees are allowed to stand many years without any thinning, the soil becomes exhausted, and the trees over-top and destroy each other, and the stems of the survivors are drawn up so tall, and so feeble, that they will not be able to support their tops, after dead and decaying trees are removed. It will be impossible to preserve forests of that description and maintain the selected trees in a healthy condition.

Whether *pruning* our forests is advisable, is a mooted question. We have put it to many excellent farmers without gaining any well-established opinions. At a meeting of the Concord, Mass., Farmers' Club, which we recently attended, several statements were made by gentlemen owning and managing forests, all of which went to show that forests may be managed with as much advantage to them as to apple or pear orchards. One statement, by a careful and entirely reliable farmer, was that, on a piece of land which he plowed and planted with corn 19 years ago, the yellow pine trees standing on it now will give 40 cords of wood per acre on a portion of it that had been carefully pruned. On another portion not pruned, the growth is not near so heavy. The pruning was done in mid-winter.

Thinning and pruning must be commenced early to become successful, and pruning must be done with care. In cutting off a branch the blow must be *upward*. If struck down, it will break the fibres of the wood and extend it into the body of the tree. The use of the saw is better than that of the axe, though the work may not proceed so rapidly.

If proper attention is paid to the trees when young, but little artificial pruning will be required in training timber trees. Nothing should prevent the light and air from freely reaching the strong side branches of the selected trees. If these side branches become too luxuriant, and make too much shade, they may be shortened in by cutting them off just above a *live* secondary branch.

2. *We must make forest plantations, and cultivate them for their timber.*

It is a fortunate circumstance for us in New England that there is scarcely any portion of our land, except swamps and large tracts of meadows that are allowed to be flowed, that are so poor and unproductive as not to admit of improvement, provided trees suited to the quality of the soil and the nature of the climate are selected, and the proper modes of treating them are practiced. Most of our rocky hills are admirably adapted to the growth of trees. The rocks themselves afford nutriment, probably potash, and other salts. Roots know where to find these and will cluster around them, sometimes covering them with a complete network, and acting as so many little pumps, sending supplies to branches that are

waving scores of feet above them in the upper air.

Two modes may be practiced in starting a forest. 1: By sowing the seed where the trees are to remain,—and 2d. By raising the plants and transplanting them.

The young plants are quite tender, and if sowed in the open ground must have some protection in order to make them entirely successful. But the gain made in not disturbing the tap root, will be a partial compensation for this trouble.

If a nursery is desired it should be made in a forest. Select a spot inclining to moisture rather than dryness, and where the sun will find its way through the surrounding branches. Cut away the underbrush, rake off the dry leaves, and then stir the surface with the rake until it is fine and moist. Upon this sow broadcast many varieties of small seeds, such as pine, elm, maple, birch, arborvitæ, &c., and cover slightly. If the seeds are good, nearly every one will come up and grow well. Most of the plants from these seeds will be extremely small at first and will scarcely be recognized as germs of the towering elm or pine. No weeds must grow among them. In such a place few, if any, will appear. If the branches of the trees around the plants are too open, they must be protected from a too hot sun.

It is said by some that nursery trees which have the tap-root taken off, and which have been transplanted two or three times, succeed just as well as those having the entire tap-root upon them. This does not seem to us a correct theory. The oak, walnut, chestnut, &c., extend their tap-roots deep into the earth, which undoubtedly furnish large supplies of nutriment to the tree as well as greatly assist in holding it firmly in its place.

Forests not only furnish us with fuel and timber, but they improve the climate by their condensing power and the shelter they afford; and the beauty of the scenery is heightened by covering barren rocks and bleak hills with the verdure of woods.

THE MOUNTAIN ASH.

Two or three of these fine ornamental trees are near us, as we write, filled with their dark, reddish or scarlet-colored fruit. The fruit hangs in large bunches all around the outside of the tree, and when the sun glances upon them, and the branches are slightly moved by the wind, the sight is a gorgeous one. Were the fruit not molested, it would remain on the tree all winter, but the troop of robins which have been reared in the thick Norway spruces and arborvitaes near by through the summer, always linger about us until most of the berries of the mountain ash are gone, or extremely cold weather sets in.

This Ash is quite common in this State, and is one of our most beautiful ornamental trees. Its habitat is low, moist places or mountainous situations, but it thrives well on most soils. It makes a height of fifteen to twenty-five feet. The leaves are of a soft green color, and a little pale underneath. Young trees may be obtained of most nursery men, or may be raised from the seeds. The tree is hardy, requiring no unusual care, and will remain in fine condition for many years. No grounds that are ornamented with trees or shrubs should be without it. The leaves as well as flowers are ornamental. Even when both leaves and fruit are absent, the fine, spray-like branches are graceful and pleasant to look at.

PENNSYLVANIA AGRICULTURAL COLLEGE.

The statement which we recently copied from the *Country Gentleman*, to the effect that this institution had fallen so low that the instruction of its students is committed to the care of a single farm hand, is pronounced incorrect by a correspondent who claims to have been officially connected with the college for three years. He states that President Allen, who retires to private life, is succeeded by Professor Fraser, a graduate of the University of Edinburgh, and lately Brigadier General of Volunteers.

Other changes will be made in the Faculty, which, it is believed, will greatly add to the ability and efficiency of that body—changes consisting both in the appointment of new Professors for chairs already in existence, and for new Professorships; and the best men that can be had will be put in these places.

In relation to the charge that the farm of four hundred acres, though situated in Centre county, one of the best agricultural districts of the State, did not pay expenses, this writer remarks that during the present year the wheat crop, which is one of the most important on the farm, hardly yielded the seed again—and

such was the case throughout this part of the valley,—so that the expenses were in excess of the receipts; but he asserts that it has, on an average, more than paid expenses, and helped support the college with which it is connected.

In relation to the remark that the cultivation of the college farm was decidedly inferior to that of farms in the neighborhood, the writer says:—

I cannot deny that the manner in which the farm has been carried on was not creditable, and that it could not be compared favorably with other farms in the neighborhood. But this has been the result, in a great measure, of the *unreasonable system* according to which it was worked by the forced, uncompensated labor of the students. The attempt was made here that has been made many times before, to give boys as good an education as in other institutions of the kind, and at the same time to make them devote a no inconsiderable portion of their working hours to hard work, and very naturally both the education and the work were imperfect. The attempt has failed of success here, as it has failed everywhere. Hereafter the farm will be worked by skilled hired labor, and, we trust, in such a manner that we shall not be required to apologize for its appearance.

The *Country Gentleman* also furnishes the following abstract of a pamphlet giving the particulars of the plans and measures lately approved by the trustees.

1. The repeal of the rule requiring every student to work three hours daily on the farm. This rule, it is stated, has "proved uniformly injurious to the financial and educational interests of the college." Students desiring to do so, however, will be permitted to perform such labor as may be allotted to them, receiving compensation therefor, in part payment of their expenses for tuition, &c.

2. The college will comprise three courses of instruction—a course of General Science, a course of Agriculture, and a course of Literature. Instruction in Agriculture will be given under the charge of a Professor of Agriculture, "by means of books and lectures in the classroom, numerous experiments on the farm, and agricultural excursions throughout the country." Students will assist in the work connected with the experiments. "For the benefit of the farming community, an Agricultural Journal, under the editorship of the College Faculty, will be established in the course of the ensuing year. In the journal, will be published the experiments made at this college, and at other places in the United States and in Europe, with other matter of interest to agriculturists."

These and other changes, with the details involved, having been adopted by the Trustees, were submitted at the annual meeting of Delegates from the different parts of the State, on the 5th of September last. At this meeting, resolutions were passed approving the action of the Trustees, and recommending them to apply to the Legislature at its next session, "for the establishment of two additional experimental and model farms East and West, in Pennsylvania, upon lands of diversified quality," on the ground that the present college farm "is not adapted for scientific experiments sufficiently varied to benefit agriculture in parts of the State differing widely in soil and climate." It was also voted that the proposed Agricultural Journal, under the editorship of the College Faculty, is "an essential means" of usefulness among the people of the State.

We submit the foregoing abstract of this college prospectus, "without comment, other than to express our regret at what seem to us to be the impracticable features it contains. That an institution which, justly or unjustly, has been open to criticism for its management of a single farm, should undertake to carry on three at the same time and at widely distant points, strikes us as equally promising with the second and associated idea—that the College Faculty, who have hitherto had their hands perhaps somewhat over-full with the instruction of their students only, should endeavor to instruct the people of the whole State, by going into the business of agricultural editors and publishers."

VERMONT AGRICULTURAL COLLEGE.

We are indebted to Henry Clark, Esq., Secretary of the Senate, and to Mr. I. W. Sanborn, for valuable legislative and other State documents. From the latter gentleman we have just received a copy of "The First Annual Report of the University of Vermont and State Agricultural College." The corporation of the University of Vermont, an old institution at Burlington, and the corporation of the Agricultural College were united in one body corporate, last November. In August, the officers of instruction and government were organized as follows:

James B. Angell, President; Joseph Torrey, Professor of Moral and Intellectual Philosophy; McKendree Petty, Professor of Mathematics; Leonard Marsh, Professor of Vegetable and Animal Physiology; Matthew Henry Buckham, Professor of the Greek Language and Literature, and Professor *pro tem* of English Literature; Alpheus Benning Crosby, Professor of the Principles and Practice of Surgery; John Ordronaux, Professor of Physiology

and Pathology; Eli Whitney Blake, Jr., Professor *pro tem* of Chemistry and Physics; Charles Wheeler Thompson, Professor *pro tem* of Latin; and James Harvey Hills, Instructor in Drawing.

It is expected that the President of the United States will detail an army officer to give instructions in military drill and tactics.

On a circular issued by the corporation, it is said that instruction will be provided,—

1. For students who wish to pursue a course of three years in Analytical and Agricultural Chemistry, or in Civil Engineering, or in Mining and Metallurgy, and to become candidates for the degree of Bachelor of Science. By a four years' study, hereafter described, Bachelors of Science may attain to the degree of Bachelor of Philosophy.
2. For students who do not desire to take a full course of three years, or of four years, but wish to pursue certain portions of the course.
3. For young men who wish to obtain such instruction as can be furnished them by a course of lectures specially adapted to the wants of agriculturists, and to be given in February and March.

Applicants for admission to the Agricultural College must be at least fifteen years of age, and must bring satisfactory testimonials of good character, and be able to sustain an examination in all the parts of a common school education, and particularly in English Grammar, Geography, Arithmetic and Algebra, as far as Quadratic Equations.

The arrangements for the reception of students were completed only four weeks previous to the beginning of the present term. Consequently a large number of young men could hardly be expected to enter the institution on so brief a notice. Five young men, however, are now pursuing the studies of the scientific course, and the executive committee of the trustees say they "have reason to believe that a larger number of students would have applied for admission to this department, if it had been practicable to announce at an early day the course of studies to be pursued in it." They also add, "We may be permitted to say, from this brief experiment, that we are confirmed in our belief that the academic and scientific departments may be conducted not only harmoniously, but with positive advantage to each other." A subscription has been started to raise the additional sum of one thousand dollars, and the corporation seem determined to do all in their power to make the institution deserving of the support of all friends of sound learning.

OTHER conditions being equal, the cow that has warmed water for drink in severe cold weather will yield considerably the most milk, especially if a handful of meal is added to each bucketful.

THE MONTHLY FARMER.

With the New Year, the weekly NEW ENGLAND FARMER is to be enlarged by the addition of one column to each page, and by a corresponding increase of length. It is also to be printed on entirely new type throughout. How shall this additional space be occupied? We hope and expect it will be filled with thoughts and facts from the pens of the new recruits who have recently so greatly strengthened our old force of readers and writers. During the past year, notwithstanding the use of small type and a severe clipping of communications for the column of "Extracts," we have been unable to accommodate seasonably all the favors of our old friends.

In addition to these improvements in our weekly sheets, the MONTHLY NEW ENGLAND FARMER is to be revived. This pleases the editors more than all the other improvements projected by the publishers. When one takes great pains in writing an article,—one which, perhaps, embodies the result of costly and long continued experiments, observation or study,—there is a feeling of dissatisfaction in committing it to a journal which perishes in its seven days' using. The MONTHLY FARMER, printed in book form, will give permanence to all the valuable agricultural and horticultural articles which appear in the weekly. At the end of the year a title page and an alphebetical index will be prepared, and arrangements made for binding. It will then take its place with the preceding volumes of the old series, in public and private libraries, where it may be consulted "by generations yet unborn," as well as by ourselves and our cotempories. Therefore, "do good, and *communicate*. The evenings are growing long purposely.

LARGE POULTRY ESTABLISHMENTS.

The great profits which are occasionally realized on a few fowls induce many people to think of extending the business. Frequent inquiries are made for our opinion as to the expediency of engaging in the business on a large scale. From our observation and reading we have felt obliged to advise against all such enterprises. A young man from Maine recently called at our office to talk over the matter, who was very confident of a successful result. To all our objections, he replied that people generally failed because they kept the hens and

especially the cocks too long. We introduced him to one of our market men who deals largely in live poultry—frequently buying several tons per week, and consequently at times has large numbers on hand. His advice to our friend was direct: "If you have money that you want to get rid of, go ahead,—not otherwise."

At a late meeting of the New York Farmers' Club, Solon Robinson said that every attempt of that kind in this country had proved a lamentable failure. Dr. Crowell said he had seen a very large establishment near Paris, which contained two hundred thousand young chickens at the time he visited it. Another gentleman said he had lately seen it stated that this great French establishment, about which so much has been published, had proved as complete a failure as any which has been attempted in this country.

Mr. Carpenter said, Warren Leland keeps a thousand or more fowls together in Westchester county, which are fed upon orts from the Metropolitan Hotel; and that the poultry business is successful and profitable. A skillful man is employed to attend to it. Generally speaking, people keep too many cocks with their hens. I have only two for seventy hens which are sufficient.

N. C. Meeker—I have been traveling for seven years as a correspondent of *The Tribune*. During that time I have visited several poultry factories. Some of them had a fair start; the owners were encouraged. They have all failed. When confined, the hens ate their chickens; where they had no chickens to eat, they ate one another. In all cases they ate the bottoms out of the pockets of their owners.

A gentleman whose name was not announced was called upon, and somewhat reluctantly made the following statement:

I have probably spent five thousand dollars in persevering attempts to raise poultry upon a large scale. I have tried it in Westchester, Orange, and Columbia counties, N. Y., where I could procure cheap food from the city. In one case, the cost of keeping a thousand fowls was $1,100 and the net results $950. I changed my location twice, hoping for better success. Then I concluded to go to Illinois, where grain was cheap. The result was the same. I have spent my time and money, and made, as Mr. Robinson says, a "lamentable failure." I have come to the conclusion that raising poultry upon a large scale in this country is not profitable. If others think it is, they can easily try it.

At the Fair of Russell Co., C. W., beside several addresses, two young ladies read essays on "the requirements of a good farmer's wife."

CATTLE SHOWS IN KENTUCKY.

A correspondent of the Canada *Farmer* who attended the late Kentucky State Fair at Paris, remarks as follows upon certain features of the exhibition which were new to him:

All the stock is shown inside the circle of a large amphitheatre, capable of seating from ten to fifteen thousand persons, so that all have a fair chance of seeing the animals. In the centre of the circle is the judges' stand, the upper story of which is occupied by a band, which furnishes music at intervals, making it pleasant for the people, as well as causing the stock to show to better advantage. The animals in the different sections are called in by ringing a bell which is hung in the judges stand. A blue ribbon is tied on for the first prize, and a red one for the second. A marshal proclaims to the crowd the names of the successful competitors of each section. When the names of fortunate men are announced a cheer is generally got up by their friends, or those partial to the prize animal, for there is great interest taken in the decisions; a good deal of excitement prevails, and among a certain class considerable betting is indulged in on the chances of the judges' decisions. The judges are appointed some time previous to the Fair, and their names appear in the printed prize list. If any of those appointed fail to appear, others are chosen by the Board of Directors, and in case a majority of the committee fail to agree as to a decision, another is called to decide. No tickets are placed upon the animals. The judges ask no questions with regard to breeding or owner, but take the animal on his own merits, and are not supposed to know who is the owner until after the decision is given, and the marshal enquires of the groom the owner's name and announces it to the crowd.

SWISS FARMING.

New England is sometimes called the Switzerland of America. However striking may be the similarity of the scenery, there must be, we think, quite a diversity in the habits of the people, judging from the following account by "Carleton" of the Swiss style of "getting up wood," "going to mill," and "making hay." In approaching Mont Blanc, he says:—

We meet a woman with a great basket strapped upon her back filled with faggots; another one passes us on her way to mill, her "grist" in a bag lying on her shoulders and a strap from the bag crossing her forehead. In the field opposite, a third woman is mowing. She stops to sharpen her scythe, and we have an opportunity to inspect the implement. No bushwhacker in the United States—no farmer's boy in all the Union—swings so heavy a scythe —sixteen inches long, four wide, and thick enough for the track of the Metropolitan horse

railroad! A man with a three-tined wooden fork tosses up the grass to the sun which the "weaker vessel" is mowing! While watching the operation in the field, a damsel passes us with a wash-tub on her head. No grenadier of the grand army of France ever stood more erect. She is busy with her knitting-work the while.

For the New England Farmer.

A JOURNAL ON DESTRUCTIVE INSECTS.

MR. EDITOR:—Are the farmers of our New England States generally aware that there is a valuable paper published monthly in Philadelphia "for the dissemination of valuable knowledge" about insects all over the land, at a less annual cost to the subscriber than it takes us here in the city to buy a pound of good butter?

Scientific men and societies with scientific aims, have been frequently condemned for caring only for the Greek and Latin names of things, and nothing for the use to which their knowledge might be put in aid of the common necessities of every-day life. Doubtless the charge has some truth in it, but labor must be divided to accomplish much. Now here is a go-between, published by a scientific body, which invites the farmer to contribute of his knowledge about insects to the entomologist, who, in return, will do his best to aid the cultivator of the soil. It is an admirable plan, well conceived, very practical and practicable, and satisfactorily carried out; it will certainly be no less for their detriment than their discredit if our farmers don't assist in its support.

I send you the number for July last, a duplicate of which I happen to have in hand, that you may see for yourself what an admirable thing it is. It commences, you will see, with an article illustrated with wood cuts, giving some outlines of the study of insects, told in clear, simple language, so that any of our boys may acquaint themselves with the general features of their structure; then follow different articles of a column or two in length, about various insects injurious to vegetation, what they are, the injury they do, and how they may best be destroyed. One, you will notice, brings together extracts from different agricultural papers about the same insect, and clears up their apparent incongruities of statement, or exposes the mistakes into which the writers had fallen. There is, in this number also, an article on scientific names, to show why naturalists are obliged to use them. Then follow more than three pages of answers to correspondents, by the associate editor, one of the most industrious and active entomologists in the land, with a very accurate and practical knowledge of insects and their ravages. This seems to me the best feature of the journal, and is admirably sustained in each number. In this way the farmer is made acquainted with the injuries which insects are doing all over the country, and will be quite sure to find an account of some which have been giving him particular trouble, and be informed what they are, and how best to rid himself of them. In this single number are answers to communications from no less than thirteen States, extending from Maine to Kentucky, and from Maryland to Missouri.

The paper is a quarto of a dozen pages, all but two of which contain original reading matter. Surely 144 pages of such a journal as this are worth fifty cents a year. They have published it at this cheap rate in the hope that they may receive a long list of subscribers, and state that it cannot be supported on less than 5000 names. The year commences in October, and I believe every subscriber will be convinced, at the end of the year, that he has received in valuable information, ten times its cost. Now is the time to subscribe, and I hope it will receive the cordial support of every farmer and horticulturist in the land. The paper is called "*The Practical Entomologist*," and is published monthly, at No. 518 South Thirteenth Street, Philadelphia. S. H. S.

REMARKS.—About a year ago we received a circular from the "Entomological Society of Philadelphia," soliciting subscriptions towards a fund of $50,000 which it was proposed to raise "to insure the permanence of the society and the continuance of its publication." The publication alluded to was an annual volume of "Proceedings," three of which had been issued with the following pecuniary result, as stated by its publication committee, Jan. 1st, 1865:

Expenses	$1,796 33
Aggregate income	550 00
Deficiency	$1,246 33

In connection with this circular, we received the first number of a new monthly publication, entitled the "*Practical Entomologist*," to be issued GRATUITOUSLY, by an association of whose fitness for prosecuting the business of book and newspaper publishing we had no other means of judging than what was furnished by the above account current, rendered by its own special committee. In connection with these documents we were also considerately furnished with a plainly written editorial for our own columns, warmly commending both the Society at Philadelphia and its publications to the liberal contributions and patronage of the readers of the NEW ENGLAND FARMER.

We appreciate as highly as any one the labors of scientific men. We anticipate much from their cordial and hearty co-operation with what are usually termed the laboring classes.

Indeed, we include them in our list of the industrial professions, believing they should be considered working men. Still, our experience and our observation is yearly strengthening our conviction of the importance of the truth expressed by the aphorism "Every man to his trade." On this principle we have questioned the expediency of such institutions and associations as the "Department" at Washington, the Agricultural College, the Entomological Society in Philadelphia, or any similar organization, engaging in the book or periodical publishing business, especially on the *gratuitous* system. In our notice of the first number of the *Practical Entomologist*, we expressed the same opinion.

This publication has been issued one year. The free system has been abandoned, and an able and responsible editor announced for the year,—Dr. Benj. D. Walsh, of Rock Island, Illinois, to whose careful observations and ready pen the *Entomologist* is largely indebted for the valuable matter which fills its pages.

In his "salutatory," Dr. Walsh says: "What little I have hitherto done for the *Practical Entomologist*, has been done without any pecuniary benefit to myself, and solely with the object of furthering the interests of science, by proving to the people that scientific truths are often of real, practical, dollar-and-cents utility. Whether my present position will be continued beyond the current year, will depend principally upon whether the American people endorse my poor efforts for their benefit by subscribing liberally to the *Practical Entomologist*.

We therefore take pleasure in publishing and endorsing the foregoing recommendation of "S. H. S.," which we may be permitted to say comes from one of the ablest and most devoted entomologists of New England.

For the New England Farmer.

"GOOD ADVICE."

I was interested in reading the article in the FARMER of Oct. 27, with the above heading, and being a practical mechanic old enough to have worn glasses, and to be the father of five boys who are old enough to be thinking of going to learn trades or something else, I presume to offer a few hasty words upon the same subject.

The "extreme scarcity of boys who are desirous or willing to learn some good trade" is owing to some other reasons, in part at least, besides those named, i. e., disinclination to learning a trade requiring time and patience, and the absorption of so many by the war.

The general use of machinery to so much greater extent than formerly, has, probably, done much more in producing the result than any other one thing.

When I was in my teens, the cabinet business—for example—was carried on entirely "by hand," and from three to seven years were *required* for a smart boy to become a "skillful workman." The lumber, hard and soft wood, was sawed off the proper length, sawed or hewed the right width, planed the right thickness, scraped, filed, pomaced and sand-papered the right smoothness, all "by hand;" and a deal of elbow-grease, time and patience it required. But while doing it, a great amount of mental and physical discipline, besides the dexterous use of all manner of wood-worker's tools was required; so that when an apprentice *graduated* he was expected to know something useful, and to be ready to commence the doing of it. With his "kit of tools," and a hundred feet of lumber he could set up cabinet business for himself, if his "intended's" father would let him have room in his woodshed to set up his bench. He was an independent man, and could make and finish ready for use any article of household furniture, whether bureau, locker, side-board, book-case, table, light-stand, wash-stand, bedstead, chair, settee, cricket, clothes-horse, bread-trough, rolling-pin or cradle!

But now, where could a boy go to learn such a trade? Everything is done by machinery. The manufacturer don't want any apprentices, he gets his bureaus, tables, bedsteads, sofas, &c., all made by the piece, and he hires hands to *tend machines* rather than to make furniture. A boy may go into his factory (not shop) and tend his machines while the machines make the furniture, from fourteen to twenty-one years, and when he gets through, he don't know enough about the use of tools to make a decent milking-stool. And so of many other trades. But still, boys are wanted, and why the scarcity?

Another reason is, that the parents of the *best* boys do not want to have their sons go into such company as is found in too many shops, where swearing, drinking sabbath-breaking, gambling, and all sorts of licentiousness are common. It is no less true now than heretofore that "evil communications corrupt good manners" and good morals! and if manufacturers want apprentices, and such ones as will be "good, and stay," they must be more careful as to the company they put them into.

Such manufacturers as Messrs. Fairbanks, of St Johnsbury, Esty & Green of Brattleboro, Vt., and numerous others, who will have no apprentices or journeymen but such as cheerfully comply with their wholesome moral regulations, find no difficulty in getting all the apprentices they want.

No boy, who has been well brought up,—and such make the best apprentices—will desire to go into any shop of an opposite character, however much he may desire to learn a trade. The boys who are not so well brought up are the ones, most generally, that would go into the stores, offices, &c., where they will have more leisure and less labor, more temptation and less restraint.

To sum up the whole case, without going further into particulars, the great trouble is the multiplicity of machinery and the laxity of morals.

It is a broad subject, and one that ought to concern farmers, as they raise many of the apprentices. But knowing that editors dislike long yarns, and that others are better opinioners than I am, I will stop, with the wish that some expert would spin a thread in regard to another subject, so directly bearing upon this, that is, the *scarcity of children*,—three children in a family, now, being as rarely found as *six* or *eight*, thirty years ago! RADICAL.

REMARKS.—Our correspondent closes, with an allusion to a very important subject, and one which is arresting the attention, and exciting the fears of the well-wishers of our country and of our race.

For the New England Farmer.

PEAT.

The present is the best time to throw out peat for manure. If it is thrown out in the summer, much of it will become dry and hard—more fit for fuel than for manure. Every one familiar with the use of peat, knows that when it has once become dry and hard, it is very difficult to reduce it to that degree of fineness that will enable it to mingle with the soil. Who has not seen pieces of peat tumbled about for two or three years, by the plow and harrow? And when it crumbles, it is into grantles almost as hard as pebbles. The value of peat as a material for the compost heap, is now generally admitted, but its proper preparation is not so generally known or attended to. One load of fine dry peat is certainly worth two loads of green peat; and it is an important question, how can it most economically be reduced to that state of fineness and dryness that fits it to mingle most readily with barn manure, and absorb the greatest amount of urine. In this state it is much more easily handled and transported, and if it is to be spread on the soil and ploughed in, or to be spread as a top-dressing, it can be spread more evenly and more conveniently. Peat should be thrown out at least one year before it is to be used. If it is thrown out at a season when it will be exposed to freezing and thawing, it will soon become fine and mellow. It should be put in heaps of moderate depth, so that the frost may penetrate to the bottom of it. It should be thrown over, and the lumps broken, and heaped up into a compact form in the spring, when the frost has left it, and in a year it will be fit for use. The action of the air disintegrates and sweetens it. In this state it may be used as a top-dressing for grass land to great advantage, especially on dry, sandy lands. In this state it becomes the best deodorizer the farmer can use about the hogstye, the privy, the hen-house or the stable. It absorbs and retains a large amount of liquid, and readily mixes with and helps to disintegrate the barn manures. Every one who has used an old ditch bank that has lain exposed to the action of the frosts for several years, knows how much better it is than peat that has just been thrown out. Last year I used peat from the surface of a meadow that had been planted in potatoes two or three years. It was very mellow and gave me entire satisfaction.

In preparing peat for fuel, the surface should always be taken off to the depth to which the frost usually penetrates, as this portion always dries in a loose crumbly state, showing the disintegrating power of the frost. Peat from some localities contains so much acid that it is unfit for manurial uses until the acid is neutralized by the action of the rain and air or by alkalies. Peat of this description may be readily prepared for use by the help of quick lime. The best way is to make a bed of peat six or eight inches thick, and spread over it a quantity of unslaked lime; then cover this with a layer of peat; then another portion of lime; then another layer of peat,—using a cask of lime to about a cord of peat. The lime is slaked by the moisture of the peat, and the vapor given off pervades the whole mass, as yeast pervades the whole lump, mellowing and sweetening it. Peat prepared in this way makes a good top-dressing for grain or clover. It is good economy for every farmer to have a year's stock of peat on hand to which he can resort when it is wanted, and never to use it until it has been exposed to the atmosphere at least one year. From the convenience of handling and transportation, this will be found more economical than the use of green peat. If a portion of it is kept under a shed or roof, that it may always be dry, it will be the most effectual deodorizer and absorbent within the farmer's reach, and will richly repay the trouble required. If a good supply of dry peat is always on hand, much more will be used than at present, and consequently more good compost will be made. Fine dry peat is one of the best fertilizers for strawberries, grapes, and the small fruits generally, and is always ready for use, and may be conveniently applied at any season. It is not volatile, and is not lost or wasted when left on the surface of the ground, like ammoniacal manures. Mr. Bull, the originator of the Concord grape, is extending his grape culture, and has engaged a thousand loads of peat to be brought on to his grounds, that he may have a supply of fine peat on hand.

We commend this subject of the proper preparation of peat, to the attention of all economical farmers in New England, where peat so universally abounds, and where manures are so universally needed. R.

Concord, Mass., Oct., 1866.

RAISING FOREST TREES.

GATHERING SEEDS.—Seeds should always be gathered in dry weather, and those kinds which are enclosed in an outer covering, like the butternut, should be spread out in an airy situation until they are quite dry, before being packed for transportation. It is also advisable to dry all tree seeds a little, but it must be varied according to the size and natural amount of moisture they contain. Those that possess a large amount either in their covering or in the seed proper are liable to heat if packed in close air-tight boxes. Baskets and bags, or boxes with small holes bored in them, should be used for the purpose, especially if the seeds are to remain in them for several days. Sheets of paper, or layers of dry moss, may be placed between the layers of seeds to absorb the moisture, when necessary to pack the seeds before they are sufficiently dry. These remarks only apply to the larger seeds and those that naturally contain considerable moisture at the time of gathering.

The smaller seeds as well as larger ones that are inclosed in a dry covering, such as the alder, spruce, and pine, among the smaller, and beech and hickory among the larger, may be transported in bags, barrels or tight boxes; all that is necessary is to keep them dry while on transit.

PRESERVING SEEDS.—Seeds that have a firm, horn-like covering, like the locust, virgilia, etc., generally retain their vitality the longest, while the seeds of the maple, elm, and similar trees that have a very porous covering, are comparatively short-lived. The size of the seed is no indication of its vitality; the largest may perish much sooner than the very smallest.

The black walnut, horse chesnut, and butternut will seldom if ever grow after the first season, while the virgilia and locust, which are quite small, will germinate after having been kept for a dozen years. The vitality of all seeds may be retained for a much longer time than was evidently intended by Nature, if they are placed under the proper conditions. A cool, dry, and equal temperature appears to be the best adapted for the preservation of all seeds. The humidity of the atmosphere has also much to do in enabling them to retain their vitality, for while a warm, moist one is just suited to growth, it hastens the death of the seeds. For when the germinating powers of the seed have once been excited into growth, it cannot be checked without injuring, if not wholly destroying, its vitality. A warm, dry, atmosphere evaporates the moisture, causing them to shrivel, and thus destroys them.

Some seeds, as the chestnut, contain such a large amount of albuminous matter that it is quite difficult to keep the temperature and humidity of the atmosphere just in the right state for their preservation. All such seeds should be placed in the ground, or on it, soon after they are ripe, and covered with leaves or some similar material, following Nature's method, as they receive there the proper degree of warmth and moisture requisite to their preservation, better than in any other situation.

TIME FOR SOWING SEEDS.—There can be no specified time given for sowing all kinds of tree seeds, but for a general rule, very soon after they ripen is the best. It is certainly not always convenient to do so, nor is it always necessary, but with some kinds a delay of a few weeks is almost certain to result in a complete failure. Some kinds of seeds retain their vitality for years, while others for only a few months at most.

The want of specific knowledge upon this point has been the cause of many failures, and will probably continue to be so until more general information is disseminated.

The red and silver maple ripen their seeds in spring or early summer, about the first to the middle of June in this vicinity, and they retain their vitality for only a few weeks. If sowed so soon as ripe, they will come up in a few days, and make a growth of one to three feet by the time the sugar and Norway maple seeds are ripe in autumn. These two varieties of maples are among the few forest tree seeds that absolutely demand immediate planting, and then they grow very readily.—*Fuller's Forest Tree Culturist.*

BARNS—MARKET REPORTS.

I lost considerable from not having barn room for all my barley. That which was stacked out of doors was weather-stained, and will not bring so much by 10 cents a bushel, as that put in the barn—though fully as good a sample in other respects. My loss this year from stacking would pay the interest on a good sized barn.

It annoys me to see farmers sacrificing their barley, simply for want of correct information. Large quantities have been sold in this section at 85c. to 90c. per bushel, and a dollar is about the outside figure for choice four-rowed. Farmers seem to have been seized with a desire to sell at once, and have rushed in the crop and taken just what they could get, from the idea that as the yield was large, prices must be low. But they forget that hitherto a great portion of our barley has been brought from Canada, and that, large as the crop is with us, it is not large enough to supply the demand, and that the deficiency must be obtained from Canada. The price at which Canada barley can be bought, therefore, will determine the price in this market. At the time when farmers were selling here from 90c. to $1.00, barley in Toronto

was worth 60c. in gold—say 90c. in our money. The duty is 15c. more, also in gold, say 22c., and the expenses of buying, commission, freight etc. are about 20c. more, so that a Rochester maltster cannot get barley from Canada for less than $1.32 per bushel. Had our papers given this information, they would have saved the farmers of Western New York over a million of dollars. As it is, we have lost all the benefit of the duty on barley.—*Joseph Harris, in American Agriculturist.*

PRESERVING MEAT.

The following is the *Knickerbocker Pickle* as given by Judge Buel in the Albany *Cultivator* for October, 1835. We have tried it ourselves several times with good success, using, however, only about half an ounce of saltpetre instead of three ounces, as recommended.

Take six gallons of water, nine pounds of salt, three pounds of coarse brown sugar, one quart of molasses, three ounces salt-petre, and one ounce of pearlash—mix and boil the whole well, taking care to skim off all the impurities which rise to the surface. This constitutes the pickle. When the meat is cut it should be slightly rubbed with fine salt, and suffered to lay a day or two, that the salt may extract the blood; it may then be packed tight in the cask, and the pickle, having become cold, may be turned upon and cover the meat. A follower, to fit the inside of the cask, should then be laid on, and a weight put on it, in order to keep the meat at all times covered with pickle. The sugar may be omitted without material detriment. In the spring the pickle must be turned off, boiled with some additional salt and molasses, skimmed, and when cold, returned to the cask.

For domestic use, beef and pork hams should not be salted the day the animals are killed, but kept until its fibre has become short and tender, as these changes do not take place after it has been acted upon by the salt.

HORTICULTURAL HINTS.

FUSCHIAS, commonly called Lady's Eardrop, are easily kept throughout the winter, and if planted where they receive only the morning sun, form one of the most beautiful of summer-blooming plants that decorate the garden. When taken up in the fall, all that is requisite is to see that the roots are covered in the soil, and that during the winter they are just a little moist, never wet, and always free from frost. An ordinarily dry cellar, dark, will generally keep them perfectly, without any attention.

IN forming footpaths or carriage-drives in a new place, if you have not obtained the advice or aid of a landscape gardener, which you should have done, be careful not to get the curves too strong. A crooked path is, if anything, more objectionable to the eye of taste than a straight line. Let all your curved lines exhibit a reason for diverging from a straight course, and let that reason be apparent to the mind of the most thoughtless.

ALWAYS have a work bench in your wood shed or a part of your barn, if you cannot afford a room purposely as a tool and work-room. A few tools of the common kinds, saws, chisels, planes, &c., will enable you to fit up and repair, or make many a thing that if you had to hire a carpenter, you would never think of having, because of its cost. Labels, stakes, melon boxes, &c., can be made up in stormy days of fall and winter, at a great saving.

ALL clay lands, and we may say all good garden lands, if dug or plowed deeply, and turned up rough, and exposed to the winter's frost, will improve in quality full as much as the covering of one coat of manure given and worked in in spring.

ALL the paths around the house and grounds should be carefully cleaned this month, and any little repairs requisite to comfort about the house and grounds made, that comfort and security from storms, &c., may be had during the cold frost and storms of winter.

As every ruralist is supposed to have a horse and cow, we must remind them that warm and dry stables are a great preservative of their health, and that all saving of animal heat, by having a warm room, is a saving of food.

BEAN poles, dahlia stakes, &c,, should be gathered together, and stacked away carefully for another season.—*N. Y. Horticulturist.*

KEEPING CABBAGES.—Cabbages in the spring are a great scarcity, yet there is no reason that they should not be as plentiful then as in the fall. Only a little care is necessary. We have generally kept them fresh and crisp through the winter, and the plan we adopted was this. We dug a trench out of doors, about three feet deep and boxed it all around with loose boards. In this we put the cabbages, standing them on end with the roots downwards, not allowing the heads to touch. The whole was then covered with boards, placing them close enough together to keep out the wet; the earth was then heaped upon the top, forming of course a mound of about two feet in height. In this state the cabbage kept all winter long in most excellent condition. No frost reached them and they were as fresh in the spring as when first put away.—*Fredericktown Farmer.*

Mr. B. F. Allen, of Vienna, writes to the *Maine Farmer*, Nov. 8th, that he now has five lambs,—three bucks and two ewes,—which were dropped last June by one sheep. The lambs are very similar in appearance, and are nearly as large as lambs usually are of the same age.

PRUNING APPLE TREES.

I perceive that you and the Editor of the *Manchester Mirror* do not agree as to the best time for pruning apple trees. Will you please publish your reasons for preferring the autumn to the spring for that purpose, and oblige yours truly. JONA. K. SMITH.

Dublin, N. H., Nov., 1866.

REMARKS.—Certainly, and with pleasure, although it will be an "oft-told tale." The opinions we shall give are based, *first*, upon a long and careful study of the *physiology of trees*,—that is, a study of their organs and functions. *Secondly*, the *corroborative* evidence of the highest authorities on the subject, in this and other countries. And *thirdly*, a practice which has been continued nearly twenty years, in pruning trees at all seasons, carefully watching the effect of the operation upon them, and *making a record of the facts.*

When we graft an apple tree we change its habit. It then becomes, in a considerable degree, a thing of art, and must be treated afterward in an artificial manner. It assumes new forms in its growth, has smooth and more delicate branches, loses its sharp spikes or thorns, has a larger and finer foliage, and is less able to bear injuries or extreme temperature. Consequently the tree requires a more delicate handling.

There is now frequent complaint that the orchards of New England are rapidly failing. It is no doubt true that they are failing, altogether too fast. One leading cause of this is cropping them too heavily with grass and other crops, and another, pruning them unskilfully and at a *wrong season of the year*. We will say nothing of damage done by insects, at present.

Nearly all the orchards of New England that are twenty-five years old and upwards, present the clearest evidence of premature decay. Our fathers probably pruned apple trees in March and April, because they found it a comparatively leisure season. Most of it was done in March. But in this age of progress their sons ought to know better than to begin the destruction of their orchards just as they are coming to maturity. There is just as much a proper time to prune apple trees as to prune grape vines. Who ever heard of pruning the latter in March or April? And yet the principle involved is the same. Nature works alike in each, so far as the circulation of the sap is concerned.

The true rule for pruning is a simple one. *Prune when there is the least sap in the sap vessels, or sap wood, as it is called.* That occurs about midsummer, when the thin watery sap, having visited the most remote twigs and leaves, has become elaborated into a substance entirely unlike that which so recently passed up, and is going down directly under the outer bark of the branches and trunk of the tree, and plainly increasing their diameter. This is the favorable time to prune, because there is comparatively little sap left in the vessels to run out if they are cut off. This period occurs not only about midsummer, but in the autumn after the leaves have fallen, and will continue until warm and genial days intervene, when the sap will sensibly feel their invigorating power, and especially so if the ground at the time is not frozen. If a succession of warm and sunny days occur in February, the sap will start where trees stand in sheltered places, but open to the south.

A bright sun has a wonderful power upon trees. It makes the sap active at once, but it seems to become dull again on the approach of cold,—acting, in this respect, much as animals do in sudden changes of temperature. When set in motion by a proper degree of warmth, the tree goes directly about its work, roots and branches co-operating with each other. A thin, watery fluid is collected by the fine roots, and by some wonderful agency carried along through innumerable tubes, or sap-vessels, as they are called, which are in the wood that lies next to the alburnum, or that white, soft substance between the outer bark and the hard wood. First comes the outer bark, then alburnum or sapwood, and lastly the heart of the tree where no sap-vessels can be found.

As we have said above, the roots begin to fill these sap-vessels upon the approach of clear suns and warm weather, and the sap is carried by them to the remotest branch and smallest twig of the tree. Buds were formed the preceding year, and are ready to receive and use the sap as it comes along to them. If they are blossom buds the sap expands the blossom, if leaf buds it establishes the leaf, and then the tree is ready to go to work to increase its length and size in diameter.

The bright days in March usually excite the tree to decided action, and this continues until near mid-summer, or until the leaves have nearly attained their full size. Of course, ev-

ery sap-vessel is full of a thin, watery fluid intent on its errand to furnish every branch and twig its needed supplies, and swelling and pushing every bud to its utmost size and power of action. *Such is the condition of the tree in the spring.* Is it, then, a proper time to prune it—to cut off thousands of these sap-vessels and cause them to pour out the fluid which the whole tree is waiting for, and cannot live without? It needs no argument to show that trees cut when in such a state must bleed.

But the loss of the sap to the tree is not all—perhaps not the worst of it. As the sap flows out and comes in contact with the atmosphere, it becomes pungent and bitter, and poisons the tree, wherever much of it runs. The face of the wound becomes black, and is sometimes partly covered with a grayish-black mould or fungus. If the sap runs down upon the bark it is so powerful as frequently to destroy it in to the wood, turning it black and giving it an offensive taste and smell. When this is the case, the sap-wood soon becomes inactive and dies in turn.

These statements are made not from the results of single cases or experiments, but from thousands of cases, extending through many years. A single tree has been practiced upon for ten years in succession, pruning some portion of it at different seasons, and the results have been uniformly as stated above.

Now let us turn to the other side of the question.

The tree has been left untouched. The sap has gone on in its course rejoicing, and has imparted life, action, beauty and vigor to every part of the tree. Buds have swollen, blossoms expanded, and the tree is covered with large and healthy leaves. These are the lungs of the tree. They have been formed for action, and now comes the time for the performance of of their part of the duty of building up that wonderful thing which we call a tree.

The petals of the blossoms have fallen, fruit is set, and the tree requires some aliment more nutritious and substantial than the thin sap which was first sent up. The leaves prepare this. They receive the sap stored up in the cells, work it over in their laboratories, and send it back, thick and energizing, to give breadth to the trunk, and stoutness and strength to the branches. But this *does not pass through the sap-vessels*, but outside of them, between the sap-wood and the outer bark. This is called the alburnum, and makes the annual growth in the diameter of trunk and branches.

Now prune the tree, and what will happen? There is little fluid in the sap-vessels. It has mostly gone off to do its work among the branches, and hundreds of them may be taken away without the slightest appearance of sap. This has been verified in hundreds of instances in our practice. An examination of as many trees to-day, will confirm the statement.

There is still another advantage in pruning after the leaves are fully formed. The inspissated or thickened sap is descending, and will at once commence a covering of smooth, green bark over the wound which has been made. Some of the small places will be covered the same year, and those of an inch in diameter in healthy trees will be covered the second year.

So far as the flowing of the sap is concerned, these conditions exist in the tree after the leaves have fallen in the autumn, and they may then be pruned consistently. The surface of the wounds will dry before the sap flows in the spring, so as to prevent its passing out. All wounds, however, should be covered with paint, or what is better but more expensive, gum shellac dissolved in alcohol.

The observing farmer always has the true rule for pruning before him. It is this. *Never* prune when your saw will keep bright and clean. *Always* prune when the saw "gums up," so that it becomes necessary to wash it occasionally in order to have it run easy.

The collateral evidence that these conclusions are correct is abundant and conclusive. We have enough of it before us to fill a page, but our article has grown so long that we defer citing much of it at present. Prof. LINDLEY has given the best portion of his life to the study of plants and particularly trees. He says,—"The only mode of avoiding bleeding is never to wound trees when their first sap begins to flow; after a time the demand upon the system by the leaves becomes so great that there is no surplus, and therefore bleeding does not take place when a wound is inflicted."

On all matters of this kind, DOWNING is usually recorded as a safe guide; let us see what he says in relation to the particular time of pruning. In his work on the "*Fruits and Fruit Trees of America*," he says, "we should *especially avoid pruning* at that period in spring

when the buds are swelling and the sap is in full flow, as the loss of sap by bleeding is very injurious to most trees, and in some brings on a serious and incurable canker in the buds." Again he says, "our own experience has led us to believe that practically a fortnight before mid-summer is by far the best season on the whole for pruning in the Northern and Middle States. Wounds made at this season heal over freely and rapidly." Both these authorities state that winter pruning may be safely done. We do not recommend it, as it is too nice work for cold and windy weather.

WOOL GROWERS' CONVENTION.

The convention of the National Wool Growers' Association held at Cleveland on the 14th of November, was largely attended and its action was harmonious and spirited. We have not yet seen a full report of its proceedings and speeches. By a letter from W. F. Greer, Secretary of the Association, we learn that twelve States were represented by authorized delegations. A committee consisting of Hon. E. B. Pottle, of New York; Hon. Edwin Hammond, of Vermont; Hon. Victor Wright, Representative of the New England Wool Grower's Association; Hon. Norton S. Townshend, of Ohio, Dr. F. Julius LeMoyne, of Pennsylvania; Franklin Fassett, Esq., of Illinois; Eli Stillson, Esq., of Wisconsin; Lewis Willey, Esq., of Michigan; were appointed a committee to draft resolutions expressing the views of this Association relative to the Tariff upon wool and woolens, who reported the following, which were severally discussed, and *unanimously* adopted:

Resolved, That we believe that the steps taken by the National Association of Wool Growers and Manufacturers to secure a recognition of the mutuality of their interests, will, if followed out in good faith, insure the increased prosperity of both.

Resolved, That the citizen who bears the burdens of the Government is entitled to the advantages of the markets of his own country—and to compel him to pay for the privilege of such markets more than is required of foreigners, is unwise, unjust, and in the end will prove disastrous.

Resolved, That the tariff bill, as it relates to wool and woolens, agreed upon by the Joint Committee of Wool Growers and Wool Manufacturers, now before Congress, is one calculated to insure increased prosperity to the grower and manufacturer, and will tend to the general prosperity of the country, and that we will stand *firmly* by it, and seek by all proper means to secure its *early* adoption as a law.

Of the character of the convention Mr. G. D. Bragdon, a correspondent of the *Rural New Yorker*, writes,—"I have never seen a body of industrious men of equal number together, whose appearance, demeanor, and intelligence excelled that of this Association gathered here. The men embraced in this Convention were mostly men of fine physical character, with mental calibre and force to correspond. The temper of the Association was excellent. Every man meant business; every word was full of self-asserting emphasis. And if the influence of this Convention is not felt in Washington, it will not be because of any want of force in its composition and action."

NEW PUBLICATIONS.

THE FOREST TREE CULTURIST. A Treatise on the Cultivation of American Forest Trees, with Notes on the Most Valuable Foreign Species. By Andrew S. Fuller. Illustrated. New York: Geo. E. & F. W. Woodward. Boston: A. Williams & Co. 1866. Pp. 188. Price $1.50.

Since preparing our remarks upon this subject, on another page, we have received a copy of the above named work. The author is a practical horticulturist and has given considerable attention to the cultivation of forest trees. Though he does not claim to have raised trees of all species and varieties, he says he has experimented sufficiently to know whereof he writes. As specimens of the style of the book, and as containing valuable information, we copy a few paragraphs on gathering, preserving, and sowing the seeds of forest trees, which will be found in this number of the MONTHLY NEW ENGLAND FARMER.

THE OLD FARMER'S ALMANAC FOR 1867. Established in 1793, by Robert B. Thomas. Boston: Brewer & Tileston.

Though his hair may be turning gray, what New Englander is not reminded of some scrap of poetry or anecdote stored up in memory from the pages of this familiar annual, as his eyes fall on the image of Father Time, whose urn still flows as freely as in days of yore? As we look, up come a verse that we could no more forget than we could the name of Robert B. Thomas:

> "Landlord to thy bar room skip,
> Fetch a foaming mug of flip;
> Make it of our country's staple,
> Rum, New England; sugar, maple."

If not exactly tee-total, that is at least patriotic. Great then is the responsibility of those who furnish reading matter for the young, even so much as an almanac contains! To a proper appreciation of this responsibility we believe the Old Farmer's Almanac is greatly in-

debted for its unexampled prosperity during the last seventy-five years. And we are confident that a comparison of the later with the ealier numbers will furnish strong confirmation of the sentiment which heads the calendar for December, 1867:

> The world improves; with slow, unequal pace,
> "The Good Time's coming" to our hapless race;
> The general tide beneath the refulgent surge
> Rolls on resistless to its destined verge.

AGRICULTURAL COLLEGE.

The Executive and Building committees of the Agricultural College of Massachusetts, at a meeting, Nov. 21st, voted, as we learn from the *Amherst Express*, to have the College ready to receive students on the first of September next." Abandoning the idea of one large structure, the committee have adopted the plan recommended by Mr. Olmstead and Judge French, and have decided to erect five small buildings: 1. a dormitory for 50 students, with recitation rooms; 2. a chemical laboratory; 3. a boarding house; 4. a model barn; 5. a President's house. The whole estimated cost of these buildings is $65,000. The *Express* says: "the utmost harmony of purpose prevailed at the meeting, and every one of the trustees seemed determined to do his part to make the College popular and successful. President Chadbourne shows himself to be fully competent to the position and is fast bringing order out of chaos. He promises to and doubtless will, within nine months of the time of his election, have the College in operation."

CARE OF BEES IN WINTER.

If the weather is cold and snow has fallen, all stocks should be put into winter quarters. I am often asked "What is the best method of wintering bees?" I would say, any method that will secure the following conditions:—an even temperature, neither too cold, nor too warm; proper ventilation; freedom from moisture; perfect darkness and quietness. A good cellar or room away from the fire may answer very well, or a house built for the purpose would probably be still better. To secure proper ventilation with common box hives, they may be inverted, and wire cloth, or stiff net tacked on the bottom of the hives to keep the bees in. Moveable comb hives should have the honey board removed and wire cloth or stiff net put on in its place. Stocks that are to be wintered out of doors, if in box hives, should be so ventilated that there will be no danger of the ventilation being closed up by snow or ice; if in moveable comb hives, all under ventilation should be closed up, the honey board should be removed, and after putting on the wire cloth, it should be covered with corn cobs or dry straw—all that the cap or cover of the hive will shut over. It having been a very bad season for bees, where natural swarming was allowed, nearly all swarms will require feeding, and if not already fed, should at once be removed to a warm room and fed enough to winter them, so that it will not be necessary to disturb them during the winter. It would be better to feed a stock two dollars worth of sugar, rather than lose it. Where artificial swarming was practiced, and swarms were made early, not much if any feeding will be necessary. I would impress upon the minds of bee-keepers generally, the necessity of examining their stocks, as many will perish if not fed, and though feeding should be attended to in September, yet, by following the directions given above, many stocks may be saved even now.—*J. H. Thomas, in Canada Farmer.*

For the New England Farmer.

PRESERVING MILK AND RAISING CREAM.

Among the other celebrities at the "Weld Farm Festival" of last July, was a Mr. N. W. Clark from Detroit, Michigan, who was at that time travelling in the Eastern States for the purpose of introducing a new and patented invention of his, for the better preservation of milk, butter, eggs, &c. Both of us happening to be an hour or two ahead of the appointed time, I had a chance to examine his plans and drawings, and to hear from him a detailed account of what he claimed to be new discoveries in the art of preserving milk and making butter.

Mr. Clark has erected in Detroit a very large building for the purpose of supplying sweet milk to the city. It consists of a two story ice-house, the upper floor of which is of galvanized iron, on which the ice rests. In the lower story are large tin cans for holding the milk. These are placed in tanks that are constantly full of cold water from the melting ice above. The cans are filled from an office room through a funnel which passes through the thick walls of the preserving-room. A pipe and faucet from the bottom of the cans, also reaching through the wall into the office, allows of the milk being drawn out for sale, without the attendant's entering the cold apartment. The milk can be cooled down to the temperature of 34°.

The cans each contain an agitator which is moved by a small steam engine. When cream is to be taken off and sold separately the agitator is not used.

Mr. Clark claims that he can keep milk sweet a whole year if he chooses. As it never gets sour, the cans do not require to be washed. The conducting pipes are arranged with valves,

so that they may be cleansed, which is done by swabbing out with lime water.

He also claims that lime water is better than hot soap-suds to clean and purify all milk utensils; an experiment I have not yet tried, but intend to. He says he has found out many new things about the nature of milk and butter. He claims that milk several feet deep will throw up all its cream in twenty-four hours at a temperature of 34°, only 2° above the freezing point.

Having occasion to make some alterations in my fall and winter milk-rooms, while waiting for paint to dry before using them, I found it convenient to try the experiment of keeping milk in a cold room while the cream was rising. I have used my dwelling-house cellar for milk during the warm months, keeping the windows constantly opened to admit fresh, pure air. This season I kept my milk in the cellar till into November, letting the windows remain open as usual, with the temperature some mornings down to 40° and less. And I am satisfied I shall not try that experiment again at present, unless I am obliged to. I find I have lost as much as 15 per cent. of the cream, by letting it rise in a cold room. Then it takes twice as long to churn sweet cream as it does that which is sour and thick as cream will be, if kept in a warm place.

I am not entirely satisfied yet that an underground cellar is the best place in which to keep milk at any time of the year. Mr. Jason Tower, a very successful butter maker, of Franklin, Mass., has kept his milk on the first floor above the cellar all through the hot months for several years past, having a slat floor to allow some circulation of air between this and the cellar room below.

He thinks his upper room is a little too warm during the hottest weather in July and August, but he certainly has been able to make a considerably larger amount of butter per cow during the season, than I have, although other circumstances do not seem to be much in his favor. A. W. Cheever.

Sheldonville, Mass., Nov. 15, 1866.

For the New England Farmer.

MY DRAIN TILE.

Mr. Editor:—I have just had a little experience in draining under difficulties, which I will state to you.

One corner of my farm has been very wet. The top soil is a tenacious mud. Next comes a thin, clayey stratum. Under this is a very lively quicksand. An open ditch has been kept through the centre, the slope of the land being sufficient to give the water a rapid run. Last fall this ditch was cleaned out a little too deep, reaching into the quicksand a good part of the way. Heavy rains followed, making a strong brook in the ditch. This carried off the quicksand to such an extent that in some places the banks were undermined on each side for four or five feet, and fell down. I think that not less than one hundred cartloads of this under soil, were, during the fall and winter, carried to the lower level, thus making a very wide chasm in the field, and filling up the ditch on the more level ground for some forty or fifty rods; and any attempt to clean out this lower portion would set the sands in motion to fill it up again. To prevent this for the future, I have laid tiles in the ditch. This was not an easy job, owing to the liveliness of the quicksand. To keep this from flowing into the pipe, I placed bog moss at the joints, and filled up with the surface sods pressed around the pipe. Great caution had to be used to make the packing so compact that no current could run outside the pipe. In the softer places it was necessary also to lay a board on the bottom to keep the pipe steady. There are side drains leading into the main one, in all of which this quicksand was more or less troublesome.

At present, so far as finished, the drain works to my great satisfaction. The water flows freely, and the land is already perceptibly drier than I have known it in the driest times for more than twenty years. But I have one cause for fear, that I have seen no account of elsewhere. There is constantly growing in the pipe a slimy fungus, that collects and comes away in masses. I have several times pulled it out of the pipe with a stick. A few days ago I found a good half bushel of this matter collected near the mouth of the pipe. Some pieces were more than a foot long, and as they lay closely in the water, were at least an inch in diameter. My fear is, that at some time this will collect in the pipe in sufficient quantity to obstruct the water. I think it has already, at least once, temporarily choked the pipe near the upper end, as the gravel carted to fill up the ditch was for a short distance so saturated with water that a man would sink over shoes in it. But that soon became drier. There is, however, fall enough to bring a strong pressure of water against any obstruction, and I hope this will keep it clean.

Have you, Mr. Editor, ever seen anything like this in your experience? Can anything be done to prevent the growth of this fungus?

Concord, Oct. 22, 1866. M. P.

For the New England Farmer.

WINTER RECREATIONS.

As a general thing, farmers labor too unceasingly; spend too little time in recreation with their families. Many so arrange their work that a rainy day finds them with as much on hand as at any other time. Summer and winter is the same with them; the system always strained to its utmost capacity, either in physical labor or in planning for the future. Now, while it is well to be diligent in business, and to have an eye to the future, a constant tension wears out elasticity, the system becomes

prematurely old, and the aim of life is often defeated.

A man dependent upon his labor of to-day for his bread of the morrow, must necessarily be more economical of his time than he who has a comfortable property ahead, and labors to add thereto; but often, here, we find that the man with the least of this world's goods takes more recreation and enjoyment than his more worldly and better-to-do neighbor. By his recreation he loses nothing, for he is better able to accomplish a certain amount of labor in five days, than he whose system is strained to the utmost by constant labor is in six days. His recreation relaxes the strain and gives him rest, so that he is better prepared to perform a given task than in the other case. In summer, when crops and fields require a more constant attention, little time can be afforded, although a relaxation of a day occasionally would be refreshing. The winter is also a busy time with the thriving farmer, but there are times when a day spent in recreation is less felt than during the other seasons. The long evenings and short days give the farmer more time to recruit the system for the next season's work; and to the proper improvement of these evenings he must look mainly for recreation and amusement with his family.

But what shall this recreation and amusement consist in? The large class of farmers live at a distance from villages and thickly settled towns where concerts, lectures, etc., are to be enjoyed, and consequently cannot be expected often to go the distance for an evening's entertainment. In the first place then, under such circumstances, let him provide a choice selection of books, periodicals etc.,—and what better periodicals can he provide than a good agricultural and family paper?—to give food to the mind of himself and family; these read and discussed will furnish food for reflection at odd hours as well as entertainment.

If lighter recreation be desirable, get up a miniature concert,—a family generally have the elements necessary,—if the parents and older ones will relax a little and join with the younger in some innocent amusement. This may combine instruction to the young, as well, and will be enjoyed by all. A social family call at a neighbor's, of an evening, to be spent in social converse, singing, innocent games of amusement, etc.

Form farmers' clubs, and meet at one another's houses weekly, not forgetting to take the wife and older daughters as well as sons along: compare notes, discuss questions of interest in a familiar way. An essay on some subject of general interest, prepared and read by one of the members, gives variety, while at the same time it improves the participators in composition, etc. To give the female portion time to participate in such entertainments, without inconvenience, provide suitable conveniences for them to perform their daily tasks; a sewing machine to do up the sewing without that "everlasting stitch, stitch." Other provisions there are which will suggest themselves readily to the thoughtful, which should be made to give the women an opportunity of better enjoying any recreation. Provide them, and lighten their toils and cares.

The farmer can at other leisure times make a plan of his farm; a record of his operations on each field during the past season, to be studied over and improved upon the next. A complete farm record and account kept and well studied, will give a farmer a better insight into, and a better understanding of his business, than can be obtained in any other way; and relaxation will be found in making it up and in its study.

The farmer has the means of making his lot the most agreeable and delightful of all pursuits, if he but so wills it; while on the other hand he can make it quite the reverse. Let us then make a proper use of the faculties that nature has endowed us with, and make ourselves and our families comfortable and happy; and at the same time make farming a pleasing occupation desirable to be followed by our children. By so doing we shall hold out strong inducements to the young to remain on the farm away from the temptations of city life, where health and morals are liable to be corrupted.

W. H. WHITE.

So. Windsor, Conn., 1866.

For the New England Farmer.

MURIATE OF LIME.

Your journal being open as one of the great highways to the empire of agriculture, let us mingle with the industrious crowd and if possible, contribute some facts to the great granary of truth.

In 1858, I planted a little swell of land, naturally poor, in Lake Village, N. H., near "Little Bay." There was no spring of water in the swell. I mention this because in time of drought it would be unnatural to expect a fair crop. The garden had been under the cultivation of Thos. Plummer, Esq., for eight years previous, and treated to lime and salt, no manures being used. The venerable man had good crops and the land improved. Could I raise corn on that crown of gravel? was the question. From his instruction, I compounded a muriate of lime composted with loam, and planted 150 hills, using the compost as common dressing in the hills, and as I planted, spread about a common tablespoonful over the surface. The result was a crop at the rate of 70 bushels to the acre. The season was late and dry. Many well-manured fields in the intervale did not produce average crops. On a close examination, I found a thin sub-soil of lime had formed, by the use of the same material for several years in succession. This undoubtedly was the cause of its keeping up so well during the long, dry season.

The second experiment was at Guilford, N. H., the next year. From 52 hills (about one rod and a half,) the result was one bushel and one peck of shelled corn. Quite a number of gentlemen in Guilford and Laconia, witnessed the result, and the editor, Mr. WALLACE, of the Winnipiseogee *Gazette*, in an article on the fruitful yield, after the agricultural premiums of that fall were awarded for the best specimens of corn, stated he had a handsome show at his office raised by a gentleman in Guilford.

I have used a muriate of lime of my own preparing for several years past, with good results. This season I tried an article I had seen advertised in the FARMER and other journals, patented in February last by a gentleman of this city; it being offered at much less cost than I could prepare it in small quantities. With this I planted sweet corn from the Department at Washington. I used this new compound, composted with loam about one to six. Planted as in previous years; the result shows a decided improvement in the Muriate of Lime referred to, containing as it does some properties which proved obnoxious to worms and garden insects. From 40 hills I had 360 ears of corn, every ear filled out to the tip, and much of it was tasseled on the end and corn matured in the tassels. I used it throughout my garden, and my potatoes are perfectly sound and untouched by worms. I send you a few specimens of corn, as vouchers for my experiment. VERITY.

Cambridge, Mass., Nov. 12, 1866.

REMARKS.—With the above article we received several handsome ears of sweet corn. They are of fair size, appear to be well matured, and are not only filled to the tip, but a strong tendency is manifested to pile up the kernels one on another, forming a little ball or cap on the extremity of the cob.

For the New England Farmer.

TEA.

After reading an article on "How to use Tea and Coffee" in the issue of the FARMER of Nov. 3d, which speaks of the "nutriment" in tea, and the care necessary to obtain it, I wish to offer a few thoughts.

Being a Yankee, I would like to know the value, in greenbacks, of the nutriment in a pound of the best kind of tea? or, in other words, if the nutriment in a pound of wheat flour is worth, say 8 cts., what is the nutriment in a pound of dried tea leaves worth?

It is very common to judge of the nutriment in food by the ease of digesting it; but it would be just as correct to judge by the heat that it takes to cook it. It is still worse to judge by the degree it stimulates us. I doubt the power of stimulants to *create* vital power under any circumstances—they only call it out, as the whip does the greater speed of the horse.

It is a good rule to judge of the injury that a stimulant is doing us by the bad effects we experience when we omit it. I do not suppose that a robust person who had drank moderately of tea, would feel any very unpleasant sensations from omitting his cup of tea, but a person of a nervous or susceptible temperament who has been in the habit of drinking strong tea, would rather omit his dinner than his tea.

Of the effect of coffee I have seen less, and so will not speak of it.

Again the writer says, "unlike most cerebral excitants, tea acts beneficially rather than otherwise,—preventing waste of the whole body and especially of the nervous system." This is assertion without proof, but I think a little proof is essential before we admit it is "*unlike* most cerebral excitants." Are you *sure* it "prevents the waste of the nervous system?" and if it does, are you *sure* it is an improvement on nature? From a limited knowledge of physiology I had gathered the idea that waste was the natural result of action; but here we are taught that tea excites to greater action, and the result is a diminished amount of waste.

I do not object to any information that will aid in the preparation of tea; but I do protest against lauding a useless and sometimes injurious drink as a nutritious and beneficial excitant.

Concord, Vt., Nov. 10, 1866. H.

TAKE CARE OF THE TEGS.

November is a trying month for tegs. Its storms and rapid alternations of temperature do not favorably affect the strongest of them, if exposed to their effects, and they fall with destructive severity on those which lack strength and condition, especially if dropped late in the season. The annual destruction of tegs by a wasting winter decline is enormous. A large portion of this is due to exposure and want of proper feed in the fall. They should be housed from all cold or prolonged storms, and in damp, chilly nights.

The great secret of rearing tegs is to keep them growing from the time they are weaned until they are sheared. Pampering—high grain feed in the fall and winter—is apt to lead to destructive effects. But after the grass has been withered and deprived of its nutritiousness by frost, a small allowance of grain, pumpkins, &c., is highly beneficial to them. One of the best feeds in the world for tegs is wheat bran. In the Eastern States oats are considered a better feed for them than corn; in the West, corn is the favorite feed for sheep of every description. We think the teg as much as the breeding ewe is better for having some winter "range," and it is unnecessary to say that it requires good winter shelter.

The quality and kind of its hay feed is also a matter of the first importance. Hay of any kind blanched by rains while curing is unfit for it. It cannot be made to winter well on coarse

over-ripe timothy or clover. Grain will not supply the deficiency. The teg thrives best on *early* cut hay. It should be of fine quality. It should be cured bright and green. None need be told that the best feed requires to be given with regularity—that sheep of all ages should get water in the winter—that stables should be spacious, well ventilated, and occasionally cleared of festering accumulations of manure. With a due attention to all the above circumstances the loss of tegs in our country would be materially diminished.—*Rural New Yorker.*

HEDGES AT THE WEST.

After a full and patient trial of the osage orange, since its first introduction as a hedge plant, with careful observation of the success obtained by others with it in Iowa and Illinois, a correspondent of the *Prairie Farmer* comes to the conclusion that the hedge system of fencing is totally unsuited to the protection of fields against the droves of cattle which run at large on the Western commons, and that money, time, and labor expended on the osage orange are a dead loss. He says:

I would ask of your many intelligent correspondents if they know of a single hedge that is stock proof? I have examined them all over several of the Western States, and have not seen one that could be relied on for keeping out hogs, much less smaller animals. I have seen very many beautiful thorn hedges in the State of Delaware, and also in Great Britain; but in both these cases no stock was permitted to run at large and no such severe test could be made as we apply to hedges in this country. Had such been made, these doubtless would also have failed.

When osage orange was first introduced we were told that its thorns were so powerful and persuading, that no stock of any description would go within yards of it. This was certainly a mistake. I have seen cows run and butt at a hedge now in my sight, breaking it down precisely as they do an evergreen when they have the chance. To such an extent was this carried, that the owner was obliged to put up a wire fence outside to keep stock off; and now they poke their heads between these and browse upon it with perfect impunity.

At a late interesting discussion of this subject by the New York Institute Farmer's Club, statements were make far more favorable to the success of the osage orange as a fencing plant at the West than the foregoing. It is certainly to be hoped that the unfavorable opinion of the correspondent of the *Prairie Farmer* will prove unfounded, and that the broad prairies of the West may yet be "suitably divided" into convenient fields by a living, cattle-proof hedge. At the discussion alluded to,—

Mr. Crane said his brother fenced half a section of land in Henry County, Ill., with the osage, which is a perfect fence against all stock. When the plants were two years old, they were frozen down to the ground. The dead brush was left standing and made a partial fence, while the new shoots came up ten times as thick as the old ones, making the hedge closer and better. He has a ten-acre hog-pasture fenced in this way, which holds the animals better than a board fence. Alongside an orchard, it has been left to grow untrimmed, and is there 30 feet high. It is a valuable wind screen. A machine for trimming hedges has been invented, which will enable farmers to keep their hedges in order.

This machine may obviate one of the great objections to live fences,—the constant care which is necessary to keep them in order.

Mr. S. E. Todd said that the osage orange winter kills in New York, but that there are miles of hedges in Onondaga County made of English hawthorn, which have been in existence more than 40 years, and are perfect fences against all stock.

Dr. Trimble had known of miles and miles of hawthorn hedges in Delaware and Pennsylvania, which, after serving the purpose some years, were destroyed by insects; first in gaps that were stopped by rails; then the intervening spaces of plants were neglected, grew unsightly, were abandoned for a time, and finally uprooted.

This agrees with our own observation of the experiments which have been made in hedge-growing in New England. For some twenty years we have watched the results of experiments on the "Brooks estate" in Medford, on the line of the Lowell railroad, with several kinds of plants. These experiments, conducted at considerable expense, have resulted much as Dr. Trimble says those in Delaware and Pennsylvania have done.

WOOL RAISING IN TEXAS.

We noticed a few weeks since the departure of Dr. Boynton, for Texas, with a drove of the Vermont Merino sheep. From a letter written by him in Bell county, Texas, and published in the *Mirror and Farmer*, we copy the following paragraphs:

The profits of the business here and in the North are not to be compared. There it costs from thirty to forty cents to raise a pound of wool; here it can be produced for ten cents. But then no northern man must suppose that he can come here and rapidly grow rich by keep-

ing sheep, without labor. I yesterday saw a farmer who had made $9000 in four years from a flock of a few hundred; and at the same time I find numbers who have lost as much in as many years, because they have not given their flocks the needed care. The scab and the screw worm are the great enemies of the wool-grower in this country, and they must be fought with a watchful and tireless energy, or they will soon be the victors.

Among the most successful men whom I have met, are H. J. Chamberlain and Brother, of Bell County, who were born and reared under the shadow of "old Ascutney," in Vermont. Mr. Chamberlain came to this country in 1860, bringing with him some fine stock from Vermont, his native State. He improved the stock he brought out with him, and used it in crossing upon the best flocks he could find here, until he now grazes about four thousand head. Such has been his success in breeding, that by general consent his flock stands at the head of all in central Texas, if not in the State. His ranch contains about *twenty-one thousand acres*, well watered, and is capable of feeding, summer and winter, 40,000 head of sheep.

There are abundant opportunities for young men to secure places as herdsmen, and thus learn the details of the business as it must be carried on here, and in a few years, with only a little capital, and a good supply of pluck, they would find themselves owners of good flocks. I would, however, advise no man to come here unless he feels himself able to endure the hardships and privations of a new country.

I am satisfied that when the wool-growers of Texas will give their flocks the necessary care, they can compete with any section of the world in producing wool.

The weather here during the present season has been like the long Indian Summer days with us in the North, minus the smoky haze that always attends that season in New England.

The farmers have made a good crop of corn the past season, but only a medium amount of cotton will be secured. Many acres of cotton will be entirely lost for the want of hands to pick it. On account of the heavy rains the past season, the "chills" have prevailed extensively through this country, where they have never been known before. The blacks are great sufferers from this disease. I visited a plantation last week where twenty hands are employed, and only two are able to work. Add to this the natural disinclination of the blacks to work unless by compulsion, and you can in a measure understand the difficulties under which the planter must labor.

The people generally in this State seem to accept the "situation" with cheerfulness and courage, and are hopeful for the future. In fact, their sufferings under the Confederacy had prepared them to accept any situation, and to be thankful for any condition the United States government might impose, as they well knew the change could not possibly be for the worse. There is but little money in the country, and that gold and silver. I have not seen a "greenback" since I left the tide water. Two or three years of prosperity will put Texas all right again, and enable her to take her place among the leading agricultural States of the country.

H. B.

THOUGHTS FOR THE FIRST OF JANUARY.

E'en Winter has its charms. How pure the glow,
That decks the pensive brow of evening's queen!
The spotless hills, adorned in robes of snow,
Ascend in light and loveliness serene.
Far in the tranquil distance may be seen
The hoary forests and the mountain pile.
Shut to the door! The outer air is keen;
And 'neath the cottage roof repose awhile,
Where, round its joyous hearth, the happy inmates smile.

T. C. UPHAM.

JANUARY 1, 1867.—In ancient Rome there was a temple, called the *Temple of Janus*, where festivals were held on this day, each year. Janus was an old Italian deity, the god of the sun and the year. Our word *January*, was derived from his name. The Romans were great observers of the custom of New Year's presents, and the first day of January was the time when they were mostly made. The English nobility were long in the practice of sending the king a purse with gold in it, on New Year's day, and so the custom has been passed along to us by our English ancestry.

These reciprocal greetings of esteem or affection, and presentations of tokens of regard, have a purifying influence upon the mind. Reason may be joined to custom to justify the practice. We rejoice with our friends, after having escaped the dangers that attend every year; and congratulate each other for the future, by presents and wishes for the happy continuance of that course. The very wishing our friends *A Happy New Year*, will help us to make it so to them. If we, unfortunately, forget that *charity* towards them, which "beareth all things," our New Year's wishes come back to us and soften or expel our prejudice, and we repeat the wish again as heartily as ever and crown it with corresponding acts. Thus, forbearance, charity and love are often the growth of our wishes for a happy new year to others.

January is the portal of the year. How we shall enter it, and live in it, is matter of no small consideration. If we form no resolutions

for higher, purer, and more useful lives, it is doubtful whether we shall make much progress in that direction. The thought must precede the act. No month in the twelve offers more opportunities, or more appropriate ones, for mental or physical improvement.

The Rev. THOMAS C. UPHAM, of Brunswick, Maine, has written much and well upon *American Cottage Life*, and in the introduction to a charming poem, entitled *The Winter Evening*, he says:—"The Winter Evening constitutes in the farmer's life, more truly and emphatically than in the life of any other class of persons, a period by itself, a select season, a portion of time, known and recognized by its distinctive traits, and blessed with its peculiar pleasures. It is a season of the year, when there is, to a considerable extent, a relaxation from that constant toil, which occupies him in the more genial months. He is at home, in the bosom of his family; and in the exercise and interchange of domestic feelings enjoys a degree of humble happiness of which the wealthy and luxurious have little conception."

This is true, and every farmer, whatever his tastes or amount of information may be, *can*, by a little systematic effort, so turn his winter evenings to account, as to make them the road to distinction, to pecuniary profit, and the gateway to heaven! There is no school like that of the family,—none where the mind is in so genial a mood to learn, so unrestrained and capable of exercising its full powers. It only needs one steady, persistent, intelligent mind to take the lead—not a highly-educated mind. Where is the family without such an one, man or woman, daughter or son!

The *system* must be, to give a certain amount of time to the work, and fix the mind intently upon the subject before it. There will be no need of laying out a course of study; that would probably embarrass, rather than advance the object in view. Take some book upon farm work,—French's *Farm Drainage*, for instance, or Flint's *Grasses and Forage Plants*, and read and discuss, in open meeting, every chapter of each of them, until their topics are well understood. In going through either of these, other books will be referred to, from which selections may be made, and the study and pleasure continued from evening to evening. It would not be long before neighbors would be attracted to such a circle, and the amount of solid and valuable information acquired during the evenings of a single winter would surprise all; indeed, it would be more than has been gained in a whole life-time by thousands who are living to-day!

Then more begets more. The mind, having drank deeply once at the perennial spring of knowledge, would seek higher and wider sources of information, until fitted to discharge most of the duties of life, in the field, in the forum, or on the bench!

Happy the man, in winter's stormy hour,
When woods and plains with angry snows are strown,
Who is not doomed to feel their hostile power,
But hath a shelter he can call his own,
The cheerful hearth, the amicable chair.
He, with his gossip neighbors side by side,
Spreads cheerfully the *farmer's* homely fare.
They deal the mutual jest. Then venturing wide,
With patriotic zeal elate, the nation's fate decide.

T. C. UPHAM.

CURING AND PRESERVING BEEF AND PORK.

The season has come when it is customary for most farmers to slaughter their cattle and swine, and salt down beef and pork for the ensuing winter and summer use. These articles are to be the substantial "deposits" of the kitchen department, the nucleus of unnumbered meals, and are not only destined to sustain and strengthen, but to give tone and relish to vegetables and other food.

Holding this important place, it is not only of consequence to get good animals to start with, but when procured to preserve their flesh in the best manner to retain its juices and flavor.

Every year thousands of inexperienced persons are coming forward to conduct household affairs, and become responsible for the condition in which food for the family is to come upon the table. To many of these, the question, "How shall this beef or pork be preserved?" has never been propounded. They are aware that there may be a right and a wrong way of doing it, and that when well done there are few people who do not relish a slice of nice ham or corned beef; and that many a good housewife can speak of the various advantages, in the mysteries of cookery, which belong to the well-cured, clear, pickled pork. When we *know how*, it is an easy matter to have these things of good quality, yet it is too often the case that they are put up in so

careless a manner that they are either actually unwholesome, or in such condition that they can only be eaten by persons of the strongest appetites.

For salting *beef*, the following is recommended: The best pieces are the plates, ribs and brisket. Pack the pieces in casks, giving a very slight sprinkling of salt between each piece. Then cover the meat with a pickle, by boiling together, in 4 gallons of water, 8 lbs. of salt, 3 lbs. brown sugar, 3 ozs. saltpetre, 1 oz. pearlash, for 100 lbs. meat. Keep a heavy flat stone on the meat, that it may be well immersed in the pickle. It is said that beef packed in this way will keep a year, and will rather improve than grow worse.

Another mode recommended for beef is to take 4 qts. rock salt, pounded fine, 8 ozs. saltpetre and 5 lbs. of brown sugar, mix them well together, and with these ingredients pack the meat down very closely, so that they will of themselves cover the whole with brine. The next spring draw off the brine, boil and take off the scum till it becomes clean, adding a little salt to it, and apply it again, and the beef will keep very sweet and fine tasted during the whole summer following.

We should advise leaving out the saltpetre in all cases. It is a dangerous article to use. Those who pack large quantities of beef for market, state that saltpetre is used to fix or give a natural cherry red color to the lean of meats; too much imparts a fiery, dark red color to beef, detrimental to its sale, and injurious to its flavor. Sugar or molasses may be safely used, and they are thought by many persons to add to the flavor of the meat. Small quantities of saleratus are also frequently employed. The object in salting, however, seems to us to be, to preserve in the greatest degree the fine qualities and flavor of the beef or hams.

Salting Pork.—Perhaps as good a plan as can be found is to cut the pork into five or six pound pieces, take off all the lean, and then pack the pieces in a barrel, with a plenty of rock salt at bottom and between the layers. A brine as strong as salt will make it, boiled and skimmed, should then be poured *boiling hot* on to the pork—enough of the brine to cover the pork. It will require nearly a bushel of salt to a barrel of pork, besides what is used for making the brine. All this may not be dissolved, but is not wasted, as it remains good for future use. This plan is extensively practiced and we believe is universally successful.

Curing Hams.—A mode highly recommended is the following:—For every 100 pounds of meat, take 5 pints of molasses, or 5 lbs. brown sugar, 8 lbs. rock salt—add 3 gallons of water, and boil the ingredients over a gentle fire, skimming off the scum as it arises. Continue the boiling till all is dissolved. Pack the hams in a cask, with the shank ends down. When the pickle is cool, pour it over the hams; some persons use it boiling hot. They may lie in pickle from two to six weeks, according to their size, state of the weather and as the taste for saltness may be.

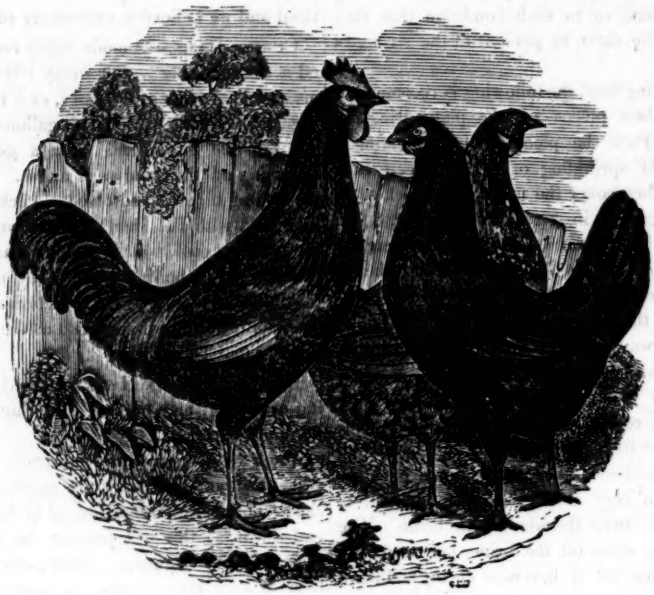
Beef or Mutton Hams, intended for smoking or drying, may be cured in this way, and be found excellent.

Much of the goodness, however, of either depends upon how they are smoked. They should not be heated, and should be hung shank end down, as this will prevent the escape of their juices by dripping. Some persons smoke hams two or three weeks,—as many days are sufficient for us; and not a few prefer the meat without any smoke at all.

The matter of preserving meat so as to preserve its fine flavor and qualities, is too little understood. A more careful examination of it would not only give us more nutritious and palatable food, but would save an immense aggregate loss.

Pork. — According to the New Albany, (Ind.,) *Ledger*, there will be a large hog crop the present season. There is an abundance of the best corn to feed them on. It believes that nearly 400,000 hogs will be slaughtered in the cities around the Falls during the packing season of 1866–67. The probable price will be between six-and-a-half and seven-and-a-half cents. The New England reader will remember, however, that these hogs are not like those usually slaughtered among us, which rarely weigh less than 300 pounds, and so along up to 600. The average weight of the Western hogs would probably be somewhere between 200 and 250 pounds, making the finest hams, and excellent pork when cured well.

—Abraham Logan, of Union Mills, Ind., writes to the New York Farmers' Club that he has lost two cattle this season by eating smutty corn.



JERSEY BLUE FOWLS.

The truth of the old adage that "every dog must have his day," is acknowledged by breeds of hens as well as by other subjects of capricious fashion. The "Blues," which originated in New Jersey, from a cross of some of the large foreign races with some of our native breeds, were once quite popular with the "fanciers," as well as with the more business-like breeders of fowls. But since the great and notable hen-fever, which introduced the Shanghaes and Cochin Chinas, the Jersey Blues seem to have been much neglected, and but little has been heard of them for many years.

Dr. Kerr, in his "Ornamental and Domestic Poultry," says:—"The color of this variety is light-blue, sometimes approaching to dun; the tail and wings rather shorter than those of the common fowl; its legs are of various colors, generally dark, sometimes lightly feathered. Of superior specimens, the cocks weigh from seven to nine pounds, and the hens from six to eight pounds."

DOWN EAST.—A correspondent of the *Maine Farmer* at Sarsfield, Aroostook County, says that Plantation was lotted out only six years ago, and now it is nearly all settled. The soil is of a reddish color, varying from one to two feet deep. The price of farms varies according to location and quality, from $300 to $600. Wild land belonging to proprietors, is worth from $1.50 to $2.00 per acre; State land 50 cents per acre, to be paid in building roads in the township, where the land is situated. Wages twenty-five dollars per month for farm labor, and from twenty to twenty-five dollars to work in the woods in the winter season. Mechanics' wages vary from $2.00 to $2.50 per day. The principal crops are oats, buckwheat and potatoes. Oats from 40 to 50 cents per bushel; buckwheat 45 to 50 cents; potatoes 30 to 50c. Average yield of oats and buckwheat forty bushels per acre.

DOING SPRING'S WORK IN THE FALL.—Work always crowds in the spring, and farmers intend to do all that is possible to be done in the fall to lighten and facilitate the labor of the more busy seasons. A late number of the *Eastern Mail* speaks of a method of preparing corn fields in the fall which is practiced in that part of Maine, and called the Daniel Bunker system. The land is ploughed and furrowed in the fall and the manure applied in the hill and covered; leaving nothing to be done in the spring but to drop the seed and cover it.

EXTRACTS AND REPLIES.

LEAD POISONING.

A correspondent sends the following caution from the *Middlesex Journal*, published in Woburn, Mass., with the request that we give it the wide publicity of the circulation of the NEW ENGLAND FARMER:

LOOK OUT FOR LEAD PAINT.—E. W. Hudson, Esq., of this town, recently lost two nice young heifers, by being poisoned from licking lead paint. The heifers had been running about the buildings where the painters had been at work, the owner not thinking of their licking the paint. As soon as they took the poison on their tongue, it was absorbed into the system, causing partial paralysis, and ending its work in convulsions and death. This case makes the third that I have seen this season. All three proved fatal. There is no known cure for this disease, and people should be very careful about having their cattle about where they can get at this deadly poison; for it is *certain death.—L. F. Gerald, Veterinary Surgeon, Woburn, Oct.* 22, 1866.

REMARKS.—Similar statements have been published within our recollection, but we are not able to refer to any now. We believe, however, the caution to "look out for lead paint," a very proper one indeed. The American Encyclopædia says that "the soluble salts of lead possess highly poisonous properties. The preparations of lead vary greatly in their intensity of action, though their effects as poisons are similar; the semi-vitrified oxide (litharge,) the carbonate (white lead,) and the diacetate (Gourland's extract,) are the most active." In his work on the horse, Mr. Youatt remarks that numerous instances are recorded of the fatal effects of the oxide and carbonate of this metal upon horses and cattle in the vicinity of lead-works and rifle-buts. When the poison is thus imbibed in small quantities, the symptoms generally extend over a considerable length of time, and consist in general derangement of the digestive system, such as loss of appetite, falling away in strength and condition, frequent attacks of cholic, with obstinate constipation of the bowels. The latter is not always present, but sometimes continued diarrhœa. The animal will also frequently suffer to a greater or less extent from paralysis. "The remedial agents for lead poison consist," says Mr. Youatt, "of active purgatives, sulphate of magnesia and croton oil being best; this should be followed by opium. If diarrhœa be present we may give the diluted sulphuric acid and opium, with an occasional dose of oil; the animal in the mean time, being kept on the most nutritious diet." But when so large a quantity is taken into the system as is done in case of lapping fresh paint with the tongue, it is probably, as Mr. Gerald says, certain death.

THANKSGIVING.

One day recently a good stout express-man came tugging up our office stairs with a headed-up barrel, which he set down with the remark, "there are more below." After bringing in another barrel and a full sack about as large as a barrel, he handed us a note, adding—"paid, all right." The note on being opened, read as follows:—

NORTH PEMBROKE, Mass., Oct. 29, 1866.

GENTS:—We have no mammoth vegetables to send you this year, therefore we send you some apples, potatoes and pumpkins; presuming you are all Yankees and like pumpkin pies.

Very respectfully, yours,

HORACE COLLAMORE.

Messrs. R. P. Eaton & Co., 34 Merchants' Row, Boston.

One of the barrels we found to be filled with assorted apples; the other, with assorted potatoes, and the sack with as handsome sugar pumpkins as we ever saw. Of course the apples and the potatoes were also of fine size and of the best varieties—none others are sent to the editors and proprietors of agricultural papers. If it is more blessed to give than to receive, Mr. Collamore should be entitled to the hearty congratulations of his friends, on this occasion. He certainly has our thanks for these tokens of his friendship and liberality.

BONE DUST.

How is it, Mr. Editor, when publishers of newspapers get a big job of advertising by the year, for a pecuniarily responsible company, that they are obligated not to admit anything, good or bad, in regard to the article advertised, from those who have been induced to invest their money for the article, by the advertisements? There have been advertising, puffs, &c. in regard to "bone dust," or "bone flour," in most or all the agricultural papers, for about a year—enough to cost, probably, something like fifty thousand dollars—in consequence of which much of the article has been sold to, and used by *farmers*. So much could not have been used the past season without producing, in those who paid so high a price for it, some opinion as to whether the like investment will pay another year, based upon their experience of the present year; but I have yet to see the first allusion to it, good or bad, by any one of your numerous correspondents, or in any agricultural paper; and I read three every week, and often several others.

The agent for its sale in this section, who did a good business at it last season, and no doubt would be glad to make twice as much the next, is anxious to see some testimonials in the FARMER from some of his customers, but doubting whether you would publish them, I will not send them at present.

Anything possessing the merits claimed for "bone flour" ought to be more generally known—should be accessible to every farmer—at a reasonable price, and if it is especially adapted to particular kinds of soil, that fact also should be clearly set forth. Why not devote one corner of the FARMER to farmers' experience with commercial fertilizers?

LECTUM.

REMARKS.—Every corner of the FARMER is, and always has been, open to the experience—good or bad—of farmers, "with commercial fertilizers," or any other article or system advertised or not advertised in its columns. And if we have not published "allusions" to the effects of flour of bone, it is because the statements have been withheld from us. And we are much surprised that our correspondent should express doubt as to our willingness to publish the testimonials alluded to, when we have so frequently invited the freest discussion on all agricultural subjects. Indeed, we have

feared that our exhortation, "farmers, write for your paper," would tire and offend the reader, from its too frequent repetition, though we have sought to give the invitation in the most attractive dress and in the least offensive form possible. The manufacturers have paid us liberally for all the space which their "advertisements, puffs, &c." have occupied, and now we will gladly publish, gratuitously, the statement of any farmer who has purchased and experimented with this fertilizer, whether the result has been favorable or unfavorable. The only condition we make is that the writer's real name shall accompany his communication, in this as in other cases. The manufacturer endorses his statements—the farmer should do as much. We invite "Lectum" to forward his testimonials, and hope that his strictures may prompt others to test the sincerity of our professions, by furnishing us with such facts as the labors and experiments of the year have developed.

WEATHER AND CROPS IN ORANGE COUNTY, VT.

After a drought of three weeks, we have just had a twenty-four hours' rain, measuring two inches on all the face of the earth, hereabouts. The previous dry time gave the farmers an excellent opportunity to finish up "fall work"—and do some extra jobs of shingling, making fences, &c., which has been well improved.

The early frosts prevented the corn from fully maturing, so that there is a much greater proportion of soft corn than usual, and seed corn will be scarce next spring. A great promise of potatoes, judging from the vines, turned out a decent yield, but inferior quality. A very good growth of pumpkins was badly injured by the untimely visits of Jack Frost, and "fall feed" being ditto, store stock generally does not look as well as it ought, and dairy stock, especially, do a "tale unfold" in regard to "choice butter." We have had rather an unusual crop of wheat and oats; barley, Indian-wheat and rye were good. R. N.

Randolph, Vt., Oct. 31, 1866.

A GREAT CROP OF RUTA BAGAS.

I have raised 775 bushels of ruta bagas from one-half acre of ground, this season. J. R. D.

Derby Line, Vt., Oct. 22, 1866.

REMARKS.—That's a rather small boo for so large a colt. Those of us who have been satisfied with one bushel to your three would like to know something about how you fed and lodged bagas at the rate of over 1500 bushels per acre.

FARM TOPICS.

I take a few minutes this evening, to write you a short letter on different subjects, commencing with

CORN.

I planted ninety rods to corn. I furrowed it out, and on a part of it I put hen droppings and dry ashes mixed together. I put a small handful in the hill. In some cases I put the corn first and the mixture on it; in other cases I put the corn on the mixture. In preparing the seed, I put a little tar into boiling water and turned the corn into the water, stirring it constantly while in. Then turned off the water and rolled the corn in plaster. For experiment, I planted a part without this preparation. The worms ate that badly which was tarred. On a portion of the field I put plaster in the hill, and although it did well, it did not equal that to which the hen-dropping mixture was applied. After the corn came up, and when it was hoed the first time, a little plaster was applied to the hill. It was hoed twice, but the weeds were large at harvest time. A part of my seed corn was carefully saved from stalks which produced two ears last year, but I could not see that the yield was any way superior.

On the ninety rods of land I harvested eighty bushels of ears of good corn, and ten of poorer; so that I have some to fatten my pigs with, without exchanging hard for soft corn with my neighbors.

MUCK ON POTATOES.

I tried muck on some potatoes, but did not see as it did any good; perhaps the season was too wet.

POULTRY.

From the first of December last, to October 1, I sold and used thirty dollars' worth of eggs, and raised fifty chickens from eighteen hens, though two of them died during the summer.

SQUASHES AND PUMPKINS.

I wish to remind the many readers of the FARMER that I told them last winter to keep their squashes and pumpkins where they will not freeze, but not to keep them in the cellar.

WRINKLES ON THE HORNS OF CATTLE.

I was asked the other day whether the wrinkles, or rings, on the horns of cattle, come from the head yearly, or, as the first one comes on, does the next one form above that, and so on? I think one comes above another, year after year. H. GRIFFIN.

Essex Junction, Vt., Oct. 23, 1866.

AGE OF BUCKS.

I will give you the result of my experience in breeding both from old and young bucks, in my flock of Cotswold sheep. Until last year, whenever it became necessary for me to change my bucks, I uniformly bought a lamb and used him for three years, when I changed again. But last year I bought a two-year-old buck, at large expense, which weighed two hundred and fifty pounds, live weight; the result is that my lambs are this year from ten to twenty pounds each heavier than usual.

I would therefore advise all breeders who expect to want a buck next year, to buy a first-class lamb this year and keep him well until needed.

My communication published in the FARMER of week before last, was incorrectly dated West Cornwall, Vt. T. L. HART.

West Cornwall, Ct., Oct. 29, 1866.

ANIMAL PHOSPHATE.

Having used Twell's Animal Phosphate the present season, I wish to state that on high ground, for all crops used, it answered every expectation; that is, the crops were very good and sound. On low ground, for potatoes, it did nearly as well as barn manure used in the same manner. On grass, owing probably, to the weather being so dry in the spring, I could perceive no benefit from the application of it. The corn was as good, I think, as I ever raised on the same kind of ground. It was planted about May 5th, and came up well; though perhaps not very quick, as rain was needed to start it. Crows pulled up some before the lines were put up. Hoed the first time about the middle of June and again the last of the month.

This piece of corn was let out on shares, which was to me a very unsatisfactory operation; as much so as anything in the farming line that I have ever done. Mr. Editor, does the man that takes land and has the best part of the crop, (of course he

does not take the meanest share when he divides it himself,) and has his team found him, expect to do all the necessary work and in good season, or only a certain part? Is there any rule about this, or is it left with the parties to agree? How is it where nothing is said about every particular part of the work? JOSEPH W. BROWN.

Kensington N H., Nov. 1, 1866.

REMARKS.—There is comparatively so little land cultivated on shares, or on lease, in this country, that the relations of landlord and tenant are not well defined, either in practice or law. In England, where a large part of the land is rented, the business of leasing has been reduced to a system. There they have printed forms which descend to particulars with almost ludicrous minuteness; many of them, says Mr. Stevens in his Farmer's Guide, include conditions relative to the payment of "kain fowls," and personal service, such as driving coals for the landlord's use—remnants of the spirit and practice of feudalism. Reservations in relation to the hunting and shooting privileges of the landlord and his friends are constant sources of dispute and litigation. But after all the perfection of covenants and conditions, each party finds its greatest security in the character of the contracting parties.

In relation to the specific inquiries of our correspondent, we would say that we suppose the common practice of the neighborhood should be taken as the governing principle. If these questions were put to a judge or jury, the inquiry would not be what is the rule in England, or in Massachusetts, but how are the farmers of Kensington, New Hampshire, and of its vicinity, in the habit of managing these things? As we cannot anticipate what the testimony would show on this point, we cannot answer his questions satisfactorily. We do not suppose, however, the one who takes a field on shares would be justified in omitting to do any part of the work which is usually done by those who cultivate on shares, on the plea that there was nothing said about that particular work in the agreement. 1867

A BADLY CORKED OX. 1867

I have a pair of nice workers, one of which, last winter got corked on one claw. It was cut very badly, and now is grown down so that he is lame. I wish to learn through you, or from some of your correspondents, what to put on to the hoof in order to grow it off as soon as possible, and how to have him shod; and whether a whole shoe in the shape of a horse shoe would work or not.

Littleton, N. H., Nov. 4, 1866. A SUBSCRIBER.

REMARKS.—One great inducement to the use of oxen instead of horses, is the fact that oxen when lamed or injured may generally be disposed of for beef by feeding them awhile, when not kept in beef order all the time. And this consideration is a strong argument in favor of keeping working oxen constantly in the best possible condition. The horse, however highly fed he may be, is valueless in case of injury which unfits him for further labor. But our correspondent wishes to cure his ox, and we wish we could give him the desired information. We hope some one who understands the nature and operation of medicines better than we do, and who has had better success in "doctoring" than we have had, will respond to the request of our Littleton "subscriber." Our own experience and observation has forced upon us the conviction that most people have too much confidence in medicine. One of the best physicians we ever knew, and one who shared largely the confidence of the community in which he lived, once remarked that, when visiting his patients, and realizing how much more they and their friends expected of him than he was able to perform, he often felt like throwing away his saddle bags and deserting the neighborhood and his profession forever. Medical science is far less potent for the cure of disease than is generally believed. Nature does the work, while the doctor gets the credit. Our correspondent's ox may get well—his wounded foot may heal, but we doubt whether anything put "on to the hoof" will ever "grow it off." By the spontaneous operation of nature, the old hoof will be gradually crowded off, as the new forms, an operation we may facilitate by proper care and management, and by soothing and cleansing applications. Perhaps also it may be necessary that the ox should rest, and possibly the whole shoe might prove beneficial,—the idea strikes us favorably,—but we have had no personal experience with it.

WITCH GRASS.

Last spring I had about two acres of rich intervale land that was so filled with witch grass that I considered it almost worthless for tillage purposes, but not for grass, for it makes the best of hay, and a pile of it if you will feed it. But being determined to eradicate it if possible, I let it lie till the first week in June, when the grass was up, say six inches or more. I then planted it deep and sowed two bushels India wheat. The growth was very large, and I threshed 80 bushels of good wheat. To all appearances, I have made a perfect cure of the witch grass. But if this does not prove a perfect killer, I will sow as early I can and clear frosts, and at proper time plow in, sow again, and in October plow in again, and by so doing I will give my land a big manuring, and will warrant a sure cure of witch grass. In so doing, I should recommend five pecks per acre to plow in.

If the farmers in the Connecticut Valley will try this thoroughly, they will find it worth more to them than the FARMER will cost them for twenty-five years. A. H. WILCOX.

St. Johnsbury, Vt., Oct. 29, 1866.

A COW OVER-FED ON CORN.

Four weeks ago I had a valuable cow eat all the corn she wished. Contrary to expectation she did not bloat, yet I physicked her well, and in a day or two she began to eat and has had a good appetite, ever since, and appears bright and healthy, only that she cannot raise herself from the ground. She can use her fore legs, but has not sufficient strength in her back or hind legs, I don't know which, to get up. I fixed a tackling and got her up each day, for a while; she could only bear her weight for a minute or so on her hind feet, then depended entirely on the rigging for support. I could not see that she gained much, and thinking perhaps if the

trouble was in her back, this course would do her no good, I have discontinued it. Can you, or any of the readers of the FARMER, tell where the trouble is, and what course to pursue with her?

West Hartford, Vt., Nov. 5, 1866. H.

REMARKS.—Not being well satisfied what course to recommend in this case, we have consulted several men of large experience in the management of cows. Like ourselves, most of them are undecided as to the character of the disease, and even to its location. Some spoke of it as "founder;" others thought it was the result of "inflammation." But whether caused by the over-dose of corn or by the physic administered, was another question on which our advisers were in doubt, as we are not informed what medicine was used. Among the causes of inflammation of the kidneys, mentioned by Dr. Dadd, are "cold, external injury, or injury from irritating substances often sent full tilt through the kidneys—as spirits of turpentine, gin and molasses, saltpetre, saleratus," &c. In speaking of founder in horses, Dr. Gunther, in his Homœopathic Veterinary Manual, remarks that founder "frequently supervenes on hard riding or driving; and more especially if the horse has had a purgative administered, from which cause I recollect three well marked cases." He also mentions "heating, and indigestible food" as a cause of founder. In case of founder from excess of food, Dr. G. recommends, "If signs of inflammation are observed, a dose of *aconitum* immediately, and after some hours, *arsenicum* is to be employed. *Arnica* may be administered in case of rigidity of the limbs and inflammation of the feet; *bryonia*, in doses frequently repeated in hydarthrus; *nux vomica*, when there is paralysis, abdomen tucked up, and an aversion to food." So much for founder and homœopathic treatment.

For inflammation of the kidneys, Dr. Dadd says: "Relax the muscular structure by the application of a blanket or horse-cloth wrung out in hot water. Injections of a mild, soothing character—slippery elm, or flax-seed-tea—should be used, but not purgatives. The application of a poultice of ground hemlock—as near the parts affected as possible, will generally be found useful; the object being to invite the blood to the surface and extremities."

The cow did not bloat probably because the corn was in an undried condition, and we are inclined to the opinion that the cow would have recovered had she been properly exercised, instead of taking the medicine.

WATCHING FOR THE METEORS.

After dreaming of clouds of shooting stars and brilliant meteors, I have risen in the small hours of the morning to find that this my last, like some other dreams of a life of more than forty years, has not been realized. The night is clear and quite light for a moonless one, but the stars seem content this year at least, on the thirteenth of November, to follow their accustomed orbits quietly, I know that this is always so, though appearances, which are often deceitful, might sometimes lead one to think they were suddenly leaving for parts unknown. Our Heavenly Father holds and guides them all by His almighty power, so that there is no jarring or discord. Would He do less for us, if we would submit to His control?

Six months have come and gone since my last communication for the FARMER. The different varieties of seed have been sowed or planted, have germinated, sprung up and borne, some thirty, some sixty, and some a hundred fold. While we farmers have been cultivating the earth thus carefully and successfully, have any of us neglected the good seed of the word and teachings of our Heavenly Father, which has been sown in our hearts from time to time? Now that our harvests are gathered in, let us inquire whether we are prepared for a harvest of eternal blessedness.

W. I. SIMONDS.

Roxbury, Vt., Nov. 13, 1866.

REMARKS.—Now that we are soon to be able to offer our friends better accommodations than heretofore, may we not hope that your calls will be much more frequent than once in six months?

POWER CIDER MILL.

Can you inform me who has a power mill in your State for grinding and pressing apples for cider, driven by water or steam? I have been told that two or three were owned in Essex Co. I would like to know how they work, and the price of them, and whether they make as good cider as the old wooden mill. I supposed that the cider coming in contact with the iron mill would discolor and give it an odd taste. J. O.

Portland, Me., Nov. 12, 1866.

REMARKS.—Messrs. Whittemore & Belcher, 34 Merchants' Row, Boston, have "Emery's Portable Hand or Power Cider Mill," complete, with triple screw press—capacity 6 to 10 barrels of cider per day, $65. It is said that, practically, there is no injurious effect from the iron, as the pomace or juice does not remain long enough in contact with the metal to be perceptibly injured. We have no knowledge of either steam or water power having been used in cider-making, either in Essex County, or elsewhere; although either might readily be applied to this and perhaps to other mills.

BARN BUILDING.

In a recent number of the FARMER a correspondent recommends *tight barns* for keeping hay, on the same principle as fruit is preserved by "canning." An acquaintance of mine in an adjoining town put in his hay, or stored it, on that principle, not long ago, excluding the air as much as possible. The hay kept first rate till it was almost rotten, when he gave up his theory, called in neighboring help and *uncanned* it as rapidly as possible. But possibly he did not cure it enough, or *can* it right. I hope to see more upon the question whether tight or open barns are best for keeping hay; and is it a fact that hay requires to be better cured for stacking than for housing? QUERIST.

WRINKLES ON HORNS, AND GRAINS IN WOOD.

From an observation of more than forty years, I find that wrinkles commence at the head of the animal and work up towards the end of the horn. Each year a new one begins at the head, caused by checking the growth. If an animal was kept at an equal stage of growing the year round, there would not be any wrinkles in its horns. It is usually

said that the first wrinkle commences at the third year. I have a pair of steers, two years old last spring, that have one wrinkle now.

In my opinion the grains of wood are the result of a similar cause. If forest trees grew the year round, there would be no grains in the wood. I have cut off the stock of an oleander tree, seven years of age, which was kept in the house and growing the year round, and found the wood to be firm and without any visible grain.

JOHN M. ROWELL.

Tunbridge, Vt., Nov. 12, 1866.

BUTTER FROM COWS KEPT ON THE "SOILING" PLAN.

MR. R. P. EATON:—You said you would like to see a sample of my fall butter. This is late fall, but I could not get round any earlier. You know I engage custom differently from most others. I agree to supply whatever amount they engage, without fail, regardless of short crops or bad weather. And it is on that account, in part, that I am enabled to obtain the price I do: 60 cents, since last May. I could not make this arrangement if I did not depend almost wholly on soiling, and had not learned to make butter *every* time from a pail of cream.

Wherever the milk or cream has been kept, the cream is made to indicate the right temperature by the thermometer before I commence churning. The temperature varies according to the temperature of the room in which I am at work, and a little regard is had to the sourness of the cream—as sour cream comes quicker than sweet, and may be churned a little cooler. But 63 degrees is very near the medium.

Our hay this year is largely rowen. You remember that handful of grass I sent you last July, grown from seed sown April 15th? We have mowed that lot twice since then, cutting three very good crops in one year, and all within six months of seeding. The timothy produced much the best *first* crop, the orchard grass the best three crops, all being quite uniform. The Northern clover did not produce as much as either of the others.

A. W. CHEEVER.

Sheldonville, Mass., Nov. 15, 1866.

NOTE.—The beautiful balls of butter, neatly stamped and compactly packed, sweet and fragrant, sufficiently explain to our mind the reason why our friend Cheever's customers buy all he can make at a rate above the regular market price. The secret of his success he has made clear in the above Extract, and in the communication which we publish in another column. We hope he will devote a part of his leisure hours during the approaching winter evenings, in transcribing for us the records of other successful farming operations—particularly as regards the dairy.

CAUSES OF SICKNESS—SUGGESTIONS OF AGE.

I have taken the FARMER about ten years, much to my satisfaction, and have most of them now on hand. I have been an interested observer of the improvements in agriculture, manufactures, and modes of living in twelve of the States of the Union, and in Canada, and have tried many experiments myself, some of which were successful, some far otherwise. And now, in my eighty-third year, as I look back and think of those who started in life with me, it is sad to reflect how many have fallen by the ravages of war, by pestilence, imprisonment, intemperance, and by living too fast and exercising too little.

But it appears to me that there is one great cause of sickness and death that people are not sufficiently aware of, viz: bad or impure water. Of the bad effects of impure water, I may be permitted to give an illustration from my own experience. Many years ago, when in Montreal a few days on business, I was taken very sick. A friend told me it was the water from the River St. Lawrence that made me sick, as it did all Yankees. My symptoms were very severe, and similar to those of the cholera. I walked out in the open air, took no food, drink or medicine from the evening until about six o'clock in the afternoon of the next day, and then not one-fourth of a meal. The next morning I was fit for business. I went to another hotel which was supplied with water from the main land. Another boarder at the first hotel was taken sick as I was, but he stayed, ate, drank, doctored, and died. The cholera soon after appeared there and swept off many of the inhabitants, of all classes.

Many healthy people go from these parts to places at the South and West, and die of what is called dysentery; others come back and say the water is so limy they can't drink it. The trouble may be from lime; it may be from something worse. Rain water when it first falls is good, but stagnant water soon becomes unwholesome.

There is an excellent piece in the FARMER of May 3, 1862, which I wish was published throughout the whole country, on charcoal as a purifier of water. In hilly countries good water may be obtained by digging wells on high ground from which it may be conveyed to the barn, garden, or house.

Pestilence may arise from different causes. Its seeds may float on the water or in the air, but is most prevalent in low places by rivers and marshes.

In my opinion the use of blood is another cause of sickness. The cholera and plague always come from the places where they save it for food. If fresh, it enters the system, in man or beast, without digestion and becomes a part of the same. Hogs that have the distemper come from slaughter houses, and are worthless to fat, if not distempered.

Among the conclusions which the observation and experience of a long life have forced upon me, are the following: That typhus fevers, measles, &c., mostly prevail in hog-harvest time; that beef, though a wholesome food when cooked, often causes the dysentery, when eaten raw; that great sickness and death often prevails near low, stagnant rivers, while health and long life are enjoyed on high ground near by; that the people who live the longest are those who live a busy life, and whose food is plain; that the cause of murrain in cattle is an insect taken into the system alive.

What will be the condition of this country if it advances for the next seventy-five years as it has during the past seventy-five years over which my memory extends? Are the usual effects of wealth, idleness and luxury to be witnessed, or will Jesus Christ take to Himself and rule and reign, whose right it is? PHINEAS PRATT.

Deep River, Conn., 1866.

A MUCK BED.

I have a muck bed in the middle of my farm, containing perhaps, one-eighth of an acre. A few years ago it was covered with large oak trees, with no underbrush at all. It was covered with water perhaps one-quarter of the year. The trees have been cut, the land drained, or partially so, (it can be completely,) and it is now fine feeding ground. Now, will you and the readers of the FARMER tell me whether it would be the most profitable for me to let it remain in pasture, of which I have no more than I need, or dig it out to enrich my improved land?

I have a field of two and a half acres, too wet to plough, except in a dry season, which bears a fine

burden of timothy. Last winter the grass was winter-killed in spots. On these spots I intend to sow redtop and timothy in the spring. I also intend to sow bone. When is the best time to sow the bone, now or in the early spring? I should have sown it before, but could not get it where I *know* it is *pure*. Would it be better to mix ashes with it, say two parts bone and one part ashes?

Is there any way in which I can underdrain it? The upper end of the field is only two feet higher than a ditch at the other end, a distance of twenty-one rods.

I have many other questions I would like to ask, but would not give too many at a time.

EXPERIOR.

My Farm in Old Connecticut, Nov. 15, 1866.

REMARKS.—Your *one-eighth* of an acre may be worth to you for one season, two or three dollars as pasture land. Every cord of muck you haul out—if it is of good quality—is worth $2, deposited on the field where you are to use it. The muck may be ten or even twenty feet deep. If so, you can figure yourself into a large property in a hurry! At any rate, do not hesitate to haul out—use the muck!

Sow the bone at the time you put on the grass seed. Sow the ashes by itself, this fall or winter.

You can partially drain the piece spoken of by the use of stones. The ditches may be made as deep as you please, leaving a clear outlet for what fall there is.

MATERIAL FOR WATER PIPE.

I am especially desirous of learning what is regarded at the present time, the most serviceable and enduring pipe to be used as a substitute for lead, in conducting water from wells, springs, &c.; also, where obtainable, and price, if known to you. My thought is, you published this knowledge awhile since in your valuable journal, but I find myself unable to refer to it. When your greatly coveted "MONTHLY" issue shall again appear, this difficulty, I well know from a long past experience, will be obviated.

AN OLD FRIEND AND SUBSCRIBER.

Pepperell, Mass., Nov. 15, 1866.

HOW TO FATTEN AND WHEN TO KILL HOGS.

Will some one of the readers or Editors of the NEW ENGLAND FARMER please inform me if it makes any difference what hogs are fed on the last four weeks before they are killed? If it does, please say what is best. Does it make any difference when it is killed? If it does, when is the best time, especially with reference to its shrinking when cooked. I find some pork will shrink nearly one-half, whilst some others will swell a little. The difference must be in the feeding, killing, or breed of hogs. I prefer that pork should gain in cooking rather than lose. YOUNG FARMER.

Roxbury, Vt., Nov. 16, 1866.

EARLY TOMATOES.

Last year, my father covered his asparagus bed thickly with horse manure and some frozen tomato vines which had by some accident grown there. Last spring the coarse parts that remained were raked off, when numberless tomato plants came up, strong and vigorous. Some of them were transplanted; a few were left, which ripened fruit a week or two earlier than any in the neighborhood started under glass, or in boxes in the house. The transplanted plants grew rapidly, and bore abundantly. Might not a useful hint be taken from this chance experiment? MARY.

Parsonsfield, Me., Nov. 10, 1866.

SALTING MUTTON.

A subscriber in Maine, who lost a lot of mutton that he put into the same pickle which preserved beef perfectly good, wishes to know the cause of his failure, and how to succeed next time. If the meat was perfectly good, the pickle new, and the tub sweet—important "ifs"—we cannot divine the cause of his failure. We generally use rather less salt for mutton than for beef. On the other hand, if the meat was a little tainted, if the same pickle had been used for beef or pork, or if the barrel was foul, we need not search further for the cause of failure.

TEMPERATURE OF WATER FOR SCALDING HOGS.

I have learned by many experiments that 165 degrees is about the right temperature of water for scalding hogs. Many "bad scalds" may be avoided by observing this rule. A. W. C.

Sheldonville, Mass., Nov. 15, 1866.

HOP CULTURE.

A correspondent of the New York *World* says that England is now paying from £10 to £12 per cwt.—equal to 70 to 80c per pound in our currency. Such extravagant prices will be likely to stir the Yankee blood to a fever heat. True, hops are subject to diseases, and so are our other crops. Like our grains and fruits they have enemies that prey upon them, and we should learn to contend with these difficulties. The English hop planter destroys the hop louse by an application of strong tobacco water. We can do the same. He cures the mould with flour of sulphur. We have not yet been troubled with that disease, and there are many others which have not afflicted us.

The following remarks on the cultivation of this crop are by the *Rural American*:—

"The ground intended for the hop yard should be well manured, then ploughed in April, dragged and marked four feet each way: then with a hoe on every other mark each way dig a hole about three inches deep, into which drop a hop root from three to six inches long; then cover with dirt to make it level. The root, if it does well, will throw up a sprout from each joint. Every other hill on the hop row, and next row entire, can be planted to corn or beans, as the hops do not require to be poled the first summer. Every fall each hill of hops must have two or three shovels full of manure put on it, to enrich the ground, and protect the roots from freezing. The following spring the manure must be pitched off from the hills, and the runners, if any, dug out and cut off, to prevent them from spreading all over the ground, and to preserve the hills in their places. There are but few runners the first spring, but a plenty afterwards. After the runners are removed, the poles can be set, two to each hill, about one foot apart at the bottom,

with the tops spread far enough apart to prevent the vines from running from one pole to the other, and to make the tops of the poles in the yard an equal distance from each other.

The next thing is to plough, commencing in the centre between the rows, and turning the furrows from the hill until you get near enough to each row, then turn and plough the furrow the other way; after that reverse the furrow, turning toward the hill; the rest can be done with the cultivator or hoe, keeping the ground clean and mellow. Put the vines around the poles from right to left, and tie with the yarn ravelled from an old stocking. This is full of kinks and will stretch and not damage the vine as it grows. The hops are generally ready to pick the last of August or first of September. From ten to fifteen hundred pounds is the yield per acre."

PROVOST MARSHAL GENERAL'S REPORT.

The report of this officer which has just appeared, is full of interesting statistics. The total enrollment under the Act of March 3 (the year is not given), was, in the loyal States, 2,264,063 men, not including 1,000,516 then under arms. Under the Bureau 1,120,621 men were raised at a cost of $9.84 per man. Before the Bureau was organized, 1,356,593 cost $34.01 per man. The deserters arrested and returned to the army numbered 76,526. As to desertion the report says:

It appears, beyond dispute, that the crime of desertion is especially characteristic of troops from large cities, and of the districts which they supply with recruits. The ratio per thousand of desertion to credits throughout the loyal States is 62.51. In the State of New York it rises to 89.06, and in the small States near New York City it is still higher. In New Jersey it is 107; in Connecticut, 117.23; in New Hampshire 112.22. Yet the general ratio of New England is but 74.24; the ratio of Massachusetts being 66.68, that of Vermont 51.75, and that of Maine 4.390. In the West, where large cities are rare, the average ratio sinks to 45.51.

It is probable that a more minute examination of the statistics of the army than has yet been made, would reveal the fact that desertion is a crime of foreign, rather than native birth, and that but a small proportion of the men who forsook their colors were Americans. It is a notorious circumstance that the great mass of the professional bounty-jumpers were Europeans. In general, the manufacturing States, as, for instance, Massachusetts, Connecticut, Rhode Island, New York, and New Jersey, rank high in the column of desertion; and this result is to be attributed not only to the fact that such States are dotted with towns and cities, but to the secondary fact that these towns and cities are crowded with foreigners. The respectable and industrious part of this population did, indeed, produce a mass of faithful troops; but with these were mixed a vast number of adventurers, unworthy of any country, who had no affection for the Republic, and who enlisted for money.

It is singular, and at first sight, a puzzling fact, that two extreme Western States, Kansas and California, are distinguished, respectively, by the high ratios in desertions of 117.54 and 101.86. But it must be remembered that more than half the male population of Kansas entered the service, and that, consequently, its contingent contained an unusually large percentage of men whose presence was necessary to the subsistence and protection of their families. In further explanation of this fact, something may be attributed to a lax state of discipline natural in border regiments, serving for the most part in a somewhat irregular defence of their own frontiers. As for California, it is to be observed that a portion of the contingent of that State consisted of men levied in the large cities of the East, or of adventurers from all quarters of the globe collected in the cosmopolitan thoroughfares of San Francisco.

The most fruitful source of casualties in the regular army is desertion; it reaches the high ratio of 244.25 per thousand, while in the volunteers it is but 62.51. The inference is irresistible that the men who enlisted in the regular service were far inferior in character to the troops furnished by the States; and it will probably be found, on examination, that they were more commonly levied in the large cities, and embraced a far larger proportion of foreigners. The regular service did not secure that noble class of native-born soldiers which local pride and State patriotism poured into the volunteer organizations.

The casualties of the entire military force of the nation during the war of the rebellion, as shown by the official muster rolls and monthly returns have been compiled, showing, among other items, 5221 commissioned officers, and 90,868 enlisted men killed in action, or died of wounds while in service; 2321 commissioned officers, and 182,329 enlisted men who died from disease or accident; making an aggregate of 280,739 officers and men of the army who lost their lives in service.

From carefully prepared tables, it appears the proportion per thousand which each loyal State, or group of States, furnished to the mortality list was as follows: Maine, 44.37; New Hampshire, 44.27; Vermont, 58.22; Massachusetts, 47.76; Rhode Island, 22.34; Connecticut, 35.48; New York, 35.68; New Jersey, 25,21; Pennsylvania, 31.75; Delaware, 25.63; Maryland, 17.04; District of Columbia, 3.62; Ohio, 36,55; Indiana, 30.01; Illinois, 34.80; Michigan, 44.82; Wisconsin, 42.01; Minnesota, 25.33; Iowa, 45.44; Kansas, 61.01; California, 12.34; West Virginia, 37.90; Kentucky, 25.10; Missouri, 21.74.

The general average for the groups of States was as follows: New England States, 44.76;

Middle States, 31.79; Loyal States (general ratio) 35.10; Border States, 25.32; Western States, 36.81. The report says:

"As an explanation of the superior battle mortality of the extreme Northern section of the country, I suggest the fact that this region being far removed from the seat of war, it was not necessary for any portion of the troops raised in it to remain at home on garrison duty, and they were therefore kept almost constantly at the front. Hence, also, at least in part, the high rate of this section under other heads of casualty resulting in an especial manner from field service, such as deaths by disease and discharges for disability.

A remarkable exception of the rule above noticed is Kansas, which was a frontier State during nearly the whole contest, and which, nevertheless, shows the highest battle mortality of the table. But the population of Kansas is a peculiarly pugnacious one, rendered such by its origin and history. The same singularly martial disposition which induced above half the able-bodied men of the State to enter the army without bounty, may be supposed to have increased their exposure to the casualties of battle after they were in the service.

Among the colored troops the deaths by disease were largely disproportioned to those by the casualty of war. The report says:

"The ratio is no less than 141.39 per thousand, while the highest ratio on the volunteer list is 124.02 (Iowa) and the general volunteer ratio is 59.22. This disparity is the more remarkable because the colored troops were not so severely exposed during the war to the hardships of field service proper, as is evident from the fact that their battle mortality is but 16.11 per thousand, while that of the volunteer is 35.10. The ratio of deaths by disease among the colored troops compares still more unfavorably with that of the regulars, which is but 42.27 per thousand. It seems to indicate that the negro, in the condition in which the war found him, was less able than the white to endure the exposure and annoyances of military service. It may be assumed that where one man dies of disease, at least five others are seriously sick, so that a large proportion of the colored troops must have been constantly upon the sick list."

KEEPING FOWLS.—Mr. Albert C. Vose, near Manville, pursues what seems to us a reasonable and profitable course in keeping fowls. He has enclosed an acre and a quarter of land with a high fence; and in this enclosure he keeps about a hundred and fifty hens. He informs us that during nine months of the year these fowls gave a net profit of two dollars per day, or say five hundred dollars per year. Is not this keeping fowls to some purpose? In Mr. Vose's enclosure is a running stream and fruit trees. The trees afford shade, while their fruit-bearing is improved by the fowls.—*Woonsocket Patriot.*

AGRICULTURAL ITEMS.

—There are about 25,000 bees in a swarm.

—Gail Hamilton says, we do not know how to work until we know how to play.

—It is said there is a corn field of 160 acres in extent within the city limits of Des Moines, Iowa.

—Good fences always pay better than lawsuits with neighbors.

—In Denmark, one cannot cut down his own trees without a permit from Government.

—Where do house flies come from? Who can tell when, where, and how they are propagated?

—Mr. Andrew McLaughlin, of Peacham, Vt., raised 58 bushels of wheat on 1¼ acres of land.

—Potato starch factories in Maine have paid 30 cents per bushel for potatoes this fall.

—A writer in the *Country Gentleman* says it costs him $1.75 each, a year to keep hens.

—Mr. A. Noyes, of Mears, Mich., claims to have a potato which weighs six pounds.

—The *Maine Farmer* says the hay crop of that State this year was about two-thirds its usual average.

—W. W. Chenery, of Belmont, Mass., recently harvested 1022 bushels of carrots from one acre and five rods of ground.

—Drained land is generally ten to twenty degrees warmer in summer, than that in which water stands stagnant.

—H. Hopkins, Jr., Montgomery, Vt., has a March Durham calf that weighed 750 lbs. on the first of October.

—In England and Scotland land is owned by the large landlords. This leaves the entire capital of the farmer free for active employment.

—A "steam shovel" has been put in operation in raising the Squankum Marl, so highly prized in New Jersey for its manurial value.

—A late well-informed writer says $300,000,000 a year, will not cover the damage done to farmers in this country by insects.

—About 1,500 acres of flax were grown this summer in Kankakee Co., Ill. The average price received for the crop per acre was over $30.

—"Josh, I say, I was going down street t'other day, and I seed a tree bark." "Golly, Sam, I seed it hollow." "I seed the same one leave." "Did it take its trunk with it? "Oh, it left that for board."

—Mr. Bright, in one of his late speeches, said that one-half of Scotland is owned by twelve persons, and one-half of England by one hundred and fifty.

—On the great grain growing region of the Campagna, near Rome, where the extensive plains afford the finest field in the world for the use of the reaping machine, the old sickle is still used, and the ox "that treadeth out the corn" is the only

threshing machine known or believed in. The grain is cultivated and harvested just as it was 5000 years ago.

—A letter from Buenos Ayres says the wool clip in that country will probably exceed that of last year. It is estimated that it will be worth twelve million of silver dollars.

—The prize of $100 offered by Mr. Greeley for the best grape for general cultivation has been awarded to the Concord, as raised by William H. Goldsmith, of Newark, N. J.

—Quince cuttings are generally successful when set in the fall. They are not so sure in the spring. Put them in the ground as soon as possible and protect them by a covering of barnyard manure.

—The average yield of wheat per acre in Michigan is believed not to exceed ten bushels per acre by a Marshall county correspondent of the *Western Rural.*

—Mr. Meehan, editor of the *Gardener's Monthly*, says that he has discovered long ago that the roots of trees die in proportion to the severity with which the tops are pruned.

—In some of the large dairies of Devonshire, each milker has three buckets, and divides each cow's milk into three portions, which, with their cream, are kept entirely separate.

—To keep warm feet, line your boot with calf-skin dressed soft with the hair on, or with young lamb skin. Every man should have two pairs in use, and change every day.

—J. A. Pollard, Esq., Superintendent of Vermont State prison, at Windsor, raised large vegetables this year. A marrowfat squash 73½ lbs.; a cabbage 23¼; a turnip beet 9¼; a blood beet 6¾ lbs.

—A hole in a tin pan or dish may be mended by cleaning around its edges, sprinkling on a little rosin, putting on a lump of solder and heating the other side with a lamp, or otherwise, until the solder melts.

—The people of Southbridge, Mass., are rejoicing exuberantly over their new railroad; but the Boston *Journal* says the farmers' wives who live near the track "think the engine whistle sours milk worse than thunder."

—A correspondent of the *Country Gentleman* thinks it will be found that ewes will yield more mutton from a ton of hay or grain than will any male sheep. It has been shown that they yield more wool in proportion to weight.

—A man, a short distance from the city, says no one need tell him that advertising won't cause a big rush, for he advertised ten bushels of grapes for sale, and the next morning there wasn't one left—the boys stole 'em all.

—A good substitute for buffalo robes, which are now very costly, may be made from the skin of a bullock, which is naturallv soft and woolly, or of sheep skins tanned with salt and alum and rubbed until pliable.

—The Editor of the *Turf, Field and Farm* regrets that "the turf is on a decline in Louisville, Ky. The people take no interest in racing, and it is thought that the beautiful Woodland course will have to be abandoned to the plow."

—T. C. Peters, of Maryland, says that the average yield of wool from an ordinary flock of sheep will be about one pound to twenty pounds of carcass, live weight, and that if more is obtained, it must be paid for in better care and keeping.

—A large number of horses have been sold in Maine within a few weeks at prices varying from $500 to $3350. These prices ought to secure excellent horses, and they certainly encourage persons to raise blood horses of good quality.

—What is worth doing is worth doing well. Do not keep stock, if you cannot keep them properly.

"Let the flock's good feed
Be the master's heed;
What at first he may cast
Will be doubled at last."

—In Brittany, the milk of the previous evening is mixed with the morning's milk, and after standing a few hours, the whole is churned, and is said to produce a large amount of butter, of a better quality, and will keep longer, than that treated in the usual manner.

—For the relief, but not complete cure, of the heaves, a correspondent of the *Rural American* recommends the outside of shell bark, burnt to ashes and mixed with the horse's feed, as much as he can be made to eat, and allow him to eat no dusty hay, especially clover hay.

—It has generally been supposed that there would be great difficulty in rearing chickens hatched in February and March, on account of the cold, but, with proper accommodations or conveniences, Mr. Bement says he has found it more certain than those hatched in June.

—By warmth and judicious feeding, says Mr. Bement, a hen may be made to lay as many eggs in two years as she would under ordinary circumstances in three; and every one knows, or ought to know, that a fowl fatted at two years old, is much more tender and palatable, than one that is older.

—To sort potatoes or apples, stand upright and save the backache. It is more healthy. Make a platform 3x3 feet, with sides 4 or 6 inches high. Leave a gap at one corner, to pour out from. Set the form on a barrel, or other support, and pour a bushel at a time of apples on it, and sort them standing. It is easier to lift up than stoop down.

—A Northern cotton planter in Florida, says the *Tribune*, had a dairy of three cows this summer, and they made a pound of butter a week, besides having some cream for coffee. This is what it is to live in a country without grass. A Maine farmer speaks of having one cow from which two pounds

of butter were made every day through the summer. This is what it is to live in a country where there is grass.

—After admitting the superiority of the coarse wooled sheep for mutton, generally, and especially for rearing early lambs for which butchers pay large prices, a correspondent of the *Prairie Farmer* claims that "one hundred bushels of corn fed to good *full aged* merinos will produce as much value in meat as in any other breed." Four years is regarded by him as the earliest age at which merino sheep are fit for the feed yards.

Profit in Sheep, Cows

—Mr. W. C. Schofield of Coventry, Vt., has two Leicester ewes which for the past three years have each brought him two lambs each year. He sold the lambs for sixty dollars, and the wool for twenty. His four lambs this year weighed 59, 60, 57, and 50 pounds. He has also eight cows from which he has made, since the first of April, 1200 pounds of butter, and reared four calves. The butter brought him $490.22. So says the *Vermont Farmer*.

—When on a tramp last summer, says S. P. Mayberry, in the *Maine Farmer*, there was pointed out to me a farmer who seemed to get his work along without much fuss and had more leisure time than his neighbors, and still produced as large crops. In conversation with him I found his mode of cultivation was to have no old ground, consequently no weeds to contend with. He planted his corn and potatoes on broken up ground manured in the hill, and in the fall spread on manure and plowed it under some three inches, then sowed it down to grass.

Machines dangerous

—After recording the death of a man in Dixfield, who was killed by being struck by the hook of a chain of a stump pulling machine, which gave way, the editor of the *Maine Farmer* adds: "We came very near losing our own life last summer by the giving way of a bolt while using the horse pitch fork. The bolt was fastened into the floor, to which a pully was attached, under which a rope run. As this was put to the highest tension, the bolt flew out, passing near our head with great velocity." Mowing, threshing and other machines, hay-presses, stump-pullers, horse forks, &c., should be operated with the greatest care.

—A correspondent of the *Prairie Farmer* writes from the southern part of Illinois, that the abundance of acorns, &c., in the woods, is equivalent in way of hog feed to doubling the corn crop, and is not equalled once in forty years. They are exempt from hog cholera, because hogs in the woods never have it. Sweet and Irish potatoes, turnips and cabbages are excellent. No potato rot. Much tobacco, with low prices, and a dead market. Half a cotton crop, at half of last year's prices. Hops fine, not affected by the bad season, no insects. I have picked many burs three inches long. This crop promises to go ahead in "Egypt."

Ladies' Department.

From the Western Rural.

DARNING SOCKS.

BY MRS. S. E. BURTON.

Lucy alone at the window
Softly and coslly rocks,
Busily plying the needle,
Darning her husband's old socks;
Loving and sweet little woman,
Fond of each housewifely care,
No queen in her royal palace
With Lucy in wealth can compare.

White is the floor of the kitchen,
Soft sings the kettle for tea,
And out in the bright Summer garden
Children are sporting in glee.
Down in the clover-clad meadows
Loud rings the blithe mower's steel,
Musical sounds of dear home-life
As sweet, artless Lucy can feel.

Skilfully plying the needle
Over and under the yarn,
Filling sad rents with a patience
Known to those only who darn;
Lucy hems in with her stitches
Thoughts bright with love as a gem,
Happily toiling for Richard,
The dearest and noblest of men!

Swift, and more swift flies the needle,
The meshes are filled one by one;
At last the big holes are all mended,
The week's task of darning is done.
But will Dick—ah! the dear careless fellow!—
Know when his wife sings and rocks,
She fastens her heart in the stitches
She weaves in his old, worn-out socks?

South Haven, Mich., 1866.

HOUSEHOLD ECONOMY.

CONTRIBUTED FOR THE NEW ENGLAND FARMER.

Mr. EDITOR:—I send a few well-tried receipts for your domestic department.

Bread and Butter Pudding.

Five or six slices of stale bread should be buttered and cut about two inches square. Warm a quart of milk; pour a pint over the bread; to the other pint add two tablespoonfuls of fine sugar; a quarter of a nutmeg, and the yolks of four eggs. Pour the whole into a buttered dish and bake twenty minutes. Then cover it with the beaten white of the eggs; set it back and brown. Eat with hard sauce; a tablespoonful of butter beaten with nine spoonfuls of sugar.

Cake Pudding.

Three tablespoonfuls of melted butter, mixed while warm, with a cup of powdered sugar; one pint of sifted flour; two teaspoons of cream of tartar; one of soda; one teacup of sweet milk; one egg. Beat hard, and bake twenty minutes in a small oval or round dish.

Sauce. Two cups of sugar worked with half a cup of butter; one cup of wine, a teaspoonful at a time. Beat hard; set it into a pan of hot water ten or fifteen minutes; serve hot.

Ginger Pudding, (from Kentucky.)

Three cups of molasses; one cup of butter; two teaspoons of saleratus; four eggs; four and a half cups of flour; ginger and nutmeg. Steam or bake. To be eaten with any kind of nice sauce. This pudding will keep any reasonable length of time, and is good either hot or cold. MARY.

Parsonsfield, Me., Nov. 12, 1866.

Cheap Cookies.

One cup of cream; one-half cup of butter; one and a half cups of sugar; two eggs; one teaspoonful saleratus. Mould as soft as you can roll, and bake in a quick oven.

Newport, N. H., Oct., 1866. NELLIE.

REMARKS.—We hope that our lady readers will see that this department of our paper is well supplied during the coming volume.

For the New England Farmer.

HOUSEHOLD CONVENIENCES.

Backwardness of Farmers in the adoption of facilities—Growing distaste for household duties—Domestics afford little relief—Ambition for display—Tendency to a system of communism—Failure of labor-saving machines—Simplicity of living and the exercise of common sense suggested as a remedy.

I fully agree with Jenny and other correspondents, who wrote upon this subject last winter, that farmers are too slow in adopting the modern improvements and convenient arrangements for facilitating house work; that either they fail to see and appreciate the benefits which science and art are continually offering to man to administer to his comfort and alleviate his toils, or they are unwilling to make the effort to possess them. In this respect farmers fall behind residents of cities and villages; still, there is visible progress in the way of improvement, and in the older States, woman's labor in the farmer's household is becoming more limited every year. Our grandmothers performed many kinds of work that are not now required of their grand-daughters. Spinning, weaving, most of the tailoring and dressmaking for the family, milking, bringing in wood, water, &c., are no longer her unavoidable duties. Besides this abridgment of labor, our young farmer's wife can command helps and conveniences that the women of two generations ago never dreamed of. And there are fair prospects that the farm-house will be relieved of the care and labor of the dairy, by selling milk to supply the cities, and by transferring butter and cheese-making to large establishments.

While these improvements are going forward, there are heard from every side loud lamentations over the drudgery of house work, especially over the hard lot of farmers' wives and daughters. House-work is becoming decidedly unpopular. American girls scorn the idea of doing it for others, and are hardly willing to do it for themselves, though perfectly able. Even the foreign help who are now doing it, quit it at the first opportunity. Women are breaking down early in life, notwithstanding all the abridgment of their labors and the conveniences that have been introduced into our houses, and they ask for a further relief.

The truth is we are departing from the simplicity of life of our forefathers, and are rapidly adopting the ways of a luxuriant and extravagant people. Ambition and pride bind upon us burdens grievous to be borne. No one is willing to be outdone by his neighbor. The poor imitate the example of the rich. Those without servants think they must do as those who have them, and those with one must do as well as those who have two or more. Housekeeping is a wearisome complication of cares, anxieties and labors, and no wonder woman is breaking down early in life, and sighs for further relief. Something, it is evident, must be done, if men wish to avoid boarding houses and maintain households at moderate expense.

Whence shall come this desired relief? Will it be found in keeping domestics? The expense question decides this mode at once for the majority of families, and many women who are so favored as to have them, talk of their care and trouble as a burden. Will it come in a further limitation of the kinds of work done in the house? Whoever reads the *Atlantic* for 1866 will perceive that Mrs. Stowe in her "Chimney Corner Talks," proposes a great change by advocating the adoption of the French mode of living. Society is rapidly preparing for the change, and I expect, ere long, house-keepers will demand that washing, ironing, bread-making and the greater part or the whole of cooking shall be done out of the house. In cities and villages this may be a judicious and economical arrangement; but among farmers the plan has some serious objections, apparent to all.

Will the desired relief be found in greater facilities for doing work? Would that it were in the power of cunning craftsmen to devise means to carry on the household machinery

smoothly, pleasantly and easily. Here arises the great difficulty; no sooner are means developed for relieving the necessities or promoting the comfort of man, than new wants and demands are created. To illustrate: it might seem a natural supposition that the introduction of the cook-stove would have materially lessened the labor of cooking. Is this the fact? Are not more hours spent now in preparing food than in the days of the brick oven and fire-place? In those times baking day was a reality; it meant, in cool weather, at least a week's supply. When the huge pot was hung for a boiled dish, the good house-keeper had the satisfaction of knowing she was not obliged to repeat the operation the next day. With the stove has come a multiplicity of dishes; a desire for a great variety at every meal, and the habit of serving everything freshly cooked and smoking hot. Hence the work of cooking is constantly on hand, and the kitchen fires seldom go out, even in hot weather. The care, vexation and time spent in this perpetual preparation of little messes, none can tell who have not been fully engaged in it. Three times a day must mother or daughter bow down before that ruthless tyrant of a cook-stove, to do the hardest and most unhealthy part of house-keeping, because custom has dictated that every meal must be freshly cooked. No matter how warm and bright the weather, how inviting the fields or garden, how urgent may be other duties, how great the longing for the recreations and pleasures of society, of reading or study, cooking must be first, and receive the woman's best energies.

Again, when the sewing machine was invented, it was thought the sewing of a family would be a pastime, and needle women began to fear their occupation was gone. But no sooner was it brought into general use, than fashion or folly dictated there shall be more work put into every garment. There must be quilting, trimming and embroidery, so that as much time as ever is required to supply a lady's wardrobe.

Again, when our good wives and daughters have toiled faithfully six days in the week, ought not the seventh to be to them a day of rest as well as to man? But in how many families is there a wide departure from the Jewish strictness of observing the Sabbath. The growing custom of making the dinner of that day the best of the week, well nigh deprives woman of this brief respite from cooking. Add to this extra work in the kitchen, the time and attention bestowed upon the elaborate toilet, now considered necessary to appear respectable at church, and the entertaining of callers and visitors, which are expected in many families, and the day brings only excitement and fatigue, leaving the house-keeper to rise Monday morning, refreshed neither in body nor spirit. Will greater household facilities bring relief here?

From these and similar illustrations which might be given, it is apparent that inventive genius cannot furnish the relief which women need. House-keeping is pretty much what we make it, and for its easy and successful accomplishment, more depends upon the controlling mind, than the material agencies at command. These latter are highly useful in their place, but are only helps or secondary means. Here, as in every department of labor, knowledge is all powerful; the knowledge and ability to perform the varied work of the house quietly and expeditiously, and she who aspires to be at its head has not half learned her task unless she has thoroughly studied and can practice strict economy of time and strength.

It is equally plain that woman's labors increase or diminish with the slightest variation in the style of living; and that wherever both heads of the family aim at simplicity of life, endeavor to adopt ideas and habits that accord with their circumstances, and are becoming enlightened men and women, our mothers and wives need not be overburdened with the legitimate duties of the household. N. S. T.